NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
643	ABIES	PROCERA	NOBLE FIR	INERT		INERT	REMOVE EMPTY SEED								ALL TRIALS WERE UNSATISFACTORY.
1069	ACHILLEA		WHITE YARROW	INERT		INERT	THRESH AND CLEAN	BELT THRESHER	SEQ.					AIR SEPARATION WAS NOT HELPFUL WITH THIS SEED. THIS SAMPLE FORMERLY PART OF PROBLEM SAMPLE #710.	SAMPLE WAS BELT-THRESHED, THEN CLEANED BY SCREENING AND GRAVITY TABLE.
				INERT		INERT		SCREEN	SEQ. 1/16 ROUND-HOLE						
				INERT		INERT		GRAVITY	SEQ.						
1022	AETHIOPICA		CALLA LILLY	AETHIOPICA		UNTHRESHED CALLA LILLY	THRESH FROM POD	BELT THRESHER		GOOD				ALSO INTERESTED IN CLEANING TECHNIQUES FOR BEGONIA SEED.	USE BELT THRESHER OR BRUSH MACHINE FOR THREHSING CALLA LILLY.
				AETHIOPICA		UNTHRESHED CALLA		BELT THRESHER		GOOD					
736	AGERATUM		AGERATUM	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC		FAIR				RELATED SAMPLES FORMERLY UNDER #736 NOW UNDER #1030 THROUGH #1036.	
1032	AGERATUM		AGERATUM	INERT		INERT	REMOVE INERT MATERIAL	SCREEN	SEQUENCE					FORMERLY UNDER SAMPLE #736	
				INERT		INERT		VIBRATORY	SEQUENCE	GOOD					
1183	AGERATUM		AGERATUM				REMOVE INERT MATERIAL								
460	AGROPYRON	DASYSTACHYUM	THICKSPIKE WHEATGRASS	AGROPYRON	TRACHYCAULUM	SLENDER WHEATGRASS	REMOVE SLENDER WHEATGRASS	OTHER	INCLINED CHUTE	FAIR		87		SEED MEASUREMENTS INDICATE DIMENSIONAL SEPARATION IS OUT OF THE QUESTION.	NO SUCCESS WITH THIS SAMPLE, ALTHOUGH THE INCLINED CHUTE WAS ABLE TO CONCENTRATE THE THICKSPIKE SOMEWHAT.
				AGROPYRON	TRACHYCAULUM	SLENDER WHEATGRASS		ELECTROSTATIC		POOR					
				AGROPYRON	TRACHYCAULUM	SLENDER WHEATGRASS		MAGNETIC		POOR					
				AGROPYRON	TRACHYCAULUM	SLENDER WHEATGRASS		PNEUMATIC		POOR					
				AGROPYRON	TRACHYCAULUM	SLENDER WHEATGRASS		VIBRATORY		POOR					
7	AGROPYRON	DESERTORUM	CRESTED WHEATGRASS	CENTAUREA	CYANUS	CORNFLOWER	REMOVE CORNFLOWER	ELECTROSTATIC	16KV, HOR=6.5, VERT=9.25, ROT=-1.25	FAIR					THE ELECTROSTATIC SEPARATOR DID A FAIR JOB YIELDING 60% BY VOLUME WITH NO CORNFLOWER, 35% WITH SOME CORNFLOWER, AND 5% WITH MANY CORNFLOWER.
392	AGROPYRON	INERME	WHITMAN BEARDLESS WHEATGRASS	BROMUS		CHEATGRASS	REMOVE CHEATGRASS.	SCREEN	6X16 SLOT					SEED MEASUREMENTS INDICATED THAT 60% OF THE CHEAT AND 4% OF THE CROP WOULD BE DROPPED IN A 1/21 ROUND-HOLE SCREEN. ALSO, 70% OF THE CHEAT AND 16% OF THE CROP WOULD BE DROPPED IN A 6X18 SLOTTED SCREEN.	NO RESULTS AVAILABLE.
				BROMUS		CHEATGRASS		SCREEN	1/21" ROUND-HOLE						
				BROMUS		CHEATGRASS		VIBRATORY	SANDPAPER DECK			75			
1042	AGROPYRON	INTERMEDIUM	INTERMEDIATE CRESTED WHEATGRASS				THRESH AND CLEAN SAMPLE	SCARIFIER	BRUSH-TYPE W/#10 CYLINDER	GOOD					THE BRUSH-TYPE SCARIFIER WITH #10 CYLINDER AND THE FILAMENT SCARIFIER YIELDED THE MOST DEHULLED SEED WITH THE MINIMUM NUMBER OF PASSES. THE SAMPLES WERE THEN CLEANED BY PNEUMATIC SEPARATOR.
								SCARIFIER	FILAMENT-TYPE	GOOD					
								BELT THRESHER	SPEED RATIO=10	FAIR					
								SCARIFIER	FRICTION	FAIR					
789	AGROPYRON	SIBIRICUM	SIBERIAN WHEATGRASS	TAENIATHERUM	ASPERUM	MEDUSAHEAD	REMOVE MEDUSAHEAD	VELVET ROLL		POOR				the medusahead in the mixture had long awns while the wheatgrass had no awn or a very short one.	THE VIBRATOR OR INDENT DISK PROVIDE A METHOD FOR REMOVING MEDUSAHEAD FROM SIBERIAN WHEATGRASS. THE VIBRATOR IS ONLY SATISFACTORY FOR VERY LOW VOLUME
								VIBRATORY		GOOD					
								INDENT DISC	SIZE A DISK	GOOD					
								PNEUMATIC		POOR					
797	AGROPYRON	SPICATUM	BLUEBUNCH WHEATGRASS	AVENA	FATUA	WILD OAT	REMOVE WEED SEEDS: WILD OATS AND BROMES.	SCREEN	SEQ. 1/12 ROUND HOLE	GOOD				PNEUMATIC AND ELECTROSTATIC SEPARATION WERE ALSO TRIED WITH NO SUCCESS.	VERY COMPLETE HAND SCREENING WAS PERFORMED WITH A 1/12 ROUND HOLE SCREEN AND A 4X22 WIRE MESH SCREEN WITH VISIBLE IMPROVEMENT. DUE TO THE DIFFICULT OF IDENTIFICATION, NO CLOSE ANALYSIS WAS ATTEMPED. EXPECTED SHRINKAGE WOULD BE 25% IN THE TWO OPERATIONS.
				BROMUS	VARIOUS	VARIOUS		SCREEN	SEQ. 4X22 WIRE MESH	GOOD					
212	AGROPYRON	SPICATUM	BLUEBUNCH WHEATGRASS	AWNS		AWNS	DE-AWN SEED, REMOVE STEMS AND TRASH (AWNS INTERLOCK AND SEED MATS TOGETHER).	OTHER	SEQ.JAMES DEBEARDER	GOOD					THE JAMES DEBEARDER/PNEUMATIC/SCREEN SEQUENCE WORKED WELL WITH THIS PROBLEM. THE PNEUMATIC SEPARATOR REMOVE BEARDS, EMPTIES AND LIGHT SEED, AND THE SCREEN DROPPED MOSTLY CLEAN SEED, ONLY A FEW OF WHICH HAD AWNS.
				AWNS		AWNS		PNEUMATIC	SEQ.	GOOD					
				AWNS		AWNS		SCREEN	SEQ. 3/64X5/16	GOOD					
1265	AGROPYRON	SPICATUM													
1157	AGROPYRON		WHEATGRASS (4 VARS)	AGROPYRON		FIELD RUN WHEATGRASS	FIND SCREEN SIZES FOR GENERAL CLEANING	SCREENS	SEQ 7 TO 10 RH TOP					FOUR VARITIES OF WHEATGRASS WERE TESTED TO DETERMINE SCREEN SIZES.	
				AGROPYRON		FIELD RUN WHEATGRASS		SCREENS	SEQ 1/24X1/2 TO 1/24X1/2 BOTTOM						
1220	AGROPYRON		WHEATGRASS	AGROPYRON	REPENS	QUACKGRASS		COLOR SORTER	250LB/HR FOR 10 CHANNEL UNIT					THIS WAS A REQUEST FOR INFORMATION CONCERNING MANUFACTURERS OF COLOR SORTERS AND WHETHER WE HAVE HAD ANY EXPERIENCE COLOR SORTING GRASSES.	

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550	AGROPYRON		WHEATGRASS	BROMUS	JAPONICUS	JAPANESE BROMEGRASS	REMOVE JAPANESE BROMEGRASS.	PNEUMATIC		FAIR	90	67	97	UNSUCCESSFUL ATTEMPTS WERE MADE WITH THE VIBRATOR, BOUNCE PLATE, SCREENS, GRAVITY TABLE, VELVET ROLLS AND SEVERAL COMBINATIONS OF SEPARATORS.	ATTEMPTS TO REMOVE THE BROMEGRASS WERE GENERALLY UNSUCCESSFUL. THE BEST SEPARATION WAS WITH THE PNEUMATIC SEPARATOR WHICH REMOVED 2/3 OF THE CONTMINANT WHILE SALVAGING 2/3 OF THE CROP. MORE AIR WOULD REMOVE MORE BROMEGRASS ALONG WITH MORE OF THE CROP.
				BROMUS	JAPONICUS	JAPANESE BROMEGRASS		OTHER	CHUTE SEPARATOR	FAIR	90	54	95		
				BROMUS	JAPONICUS	JAPANESE BROMEGRASS		ELECTROSTATIC		FAIR	90	60	96		
1087	AGROPYRON		SOPAR WHEATGRASS	BROMUS	TECTORUM	DOWNY BROME	REMOVE DOWNY BROME	PNEUMATIC		POOR				THIS LOT HAD ALREADY BEEN THROUGH A SCREENING AND GRAVITY TABLE.	BEST RESULTS WERE ACHEIVED WITH A 4X20 WIRE MESH SCREEN WHICH REMOVED 60% OF THE BROME WITH A 20% CROP LOSS. THE VIBRATOR SHOWED SOME PROMISE, REMOVING BROME AND WATERGRASS WHICH WAS ALSO PRESENT IN THE LOT.
				BROMUS	TECTORUM	DOWNY BROME		SCREEN	4X20 WIRE MESH	GOOD	97	60	99		
				BROMUS	TECTORUM	DOWNY BROME		VIBRATORY	SANDBLASTED AL. DECK	FAIR					
1165	AGROPYRON		WHEATGRASS	BROMUS	TECTORUM	DOWNY BROME	REMOVE DOWNY BROME	SCARIFIER	SEQ #14 WW	GOOD	98	80	100	MATERIAL WAS FIRST DEBEARDED TO REDUCE THE SIZE (GROAT) THE BROMUS. A 4X20 OF 4X22 WOVEN WIRE SCREEN WOULD THEN DROP MUCH OF THE BROME.	USE SCARIFIER THEN SCREENS TO REMOVE DOWNY BROME.
				BROMUS	TECTORUM	DOWNY BROME		SCREEN	SEQ 4X20 WW	GOOD					
1040	AGROSTIS	ALBA	REDTOP	HOLCUS	LANATUS	VELVETGRASS	REMOVE VELVETGRASS	SCREEN	6X38 (.015) WW	GOOD		95		BOTH SCREENS REMOVED A LARGE PORTION O	USE 6X38 WW TO REMOVE VELVETGRASS
				HOLCUS	LANATUS	VELVETGRASS		SCREEN	.027 RH	FAIR		90			
258	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	AGROSTIS	EXARATA	SPIKE BENTGRASS	REMOVE SPIKE BENTGRASS AND FINE HAIRGRASS. THIS LOT WAS RERUN MATERIAL THAT HAD BEEN PROCESSED IN A HAMMERMILL.	SCREENS	VARIOUS	POOR					VARIOUS SCREENS AND THE PNEUMATIC SEPARATOR WERE TRIED WITHOUT SUCCESS.
				AIRA	ELEGANS	FINE HAIRGRASS		SCREENS	VARIOUS	POOR					
				AGROSTIS	EXARATA	SPIKE BENTGRASS		PNEUMATIC		POOR					
				AIRA	ELEGANS	FINE HAIRGRASS		PNEUMATIC		POOR					
259	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	AGROSTIS	EXARATA	SPIKE BENTGRASS	REMOVE SPIKE BENTGRASS.	VIBRATORY	SMOOTH VINYL DECK	POOR					ALTHOUGH NO RESULTS WERE ACCEPTABLE, THE VIBRATOR SEPARATOR SHOWED A TENDENCY TO CARRY THE SPIKE BENTGRASS UPHILL MORE READILY THAN THE SEASIDE BENTGRASS.
				AGROSTIS	EXARATA	SPIKE BENTGRASS		SCREENS	VARIOUS	POOR					
				AGROSTIS	EXARATA	SPIKE BENTGRASS		PNEUMATIC		POOR					
538	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	AGROSTIS	TENUIS	COLONIAL BENTGRASS	REMOVE COLONIAL BENTGRASS								
224	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	AIRA	CARYOPHYLLEA	SILVER HAIRGRASS	REMOVE SILVER HAIRGRASS.	VIBRATORY	FINE 80 GRIT, MULTI-DECK	GOOD					THE VIBRATOR MADE WHAT APPEARED TO BE A VERY GOOD SEPARATION. A CAPACITY TRIAL INDICATED THAT A RATE OF 1.0228LBS/HR OF CLEAN SEED COULD BE EXPECTED. THIS COULD BE INCREASED, BUT THE SEPARATION MIGHT NOT BE AS GOOD.
225	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	AIRA	CARYOPHYLLEA	SILVER HAIRGRASS	REMOVE SILVER HAIRGRASS AND MOUSEAR.	VIBRATORY	FINE 80 GRIT DECK	GOOD					THE VIBRATOR NICELY REDUCED SILVER HAIRGRASS TO .08% AND MOUSEAR TO 180/LB WITH AN 89% YIELD.
				CERASTIUM		MOUSEAR		VIBRATORY	FINE 80 GRIT DECK	GOOD					
95	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	CERASTIUM		MOUSEAR	REMOVE MOUSEAR (4960/LB IN ORIGINAL SAMPLE).	DRAPER	PLASTIC BELT, 33FPM, 29 DEG	GOOD		90			THE DRAPER AND PNEUMATIC SEPARATORS BOTH DID GOOD JOBS, LOWERING MOUSEAR CONTENT TO 451/LB AND 400/LB RESPECTIVELY. THE PNEUMATIC SEPARATOR DID SLIGHTLY BETTER WITH LESS CROP LOSS.
				CERASTIUM		MOUSEAR		PNEUMATIC		GOOD		92			
				CERASTIUM		MOUSEAR		VIBRATORY		POOR					
				CERASTIUM		MOUSEAR		VELVET ROLL		POOR					
				CERASTIUM		MOUSEAR		ELECTROSTATIC		POOR					
223	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	CERASTIUM		MOUSEAR	REMOVE MOUSEAR.	INDENT CYLINDER	1/22X24 CYLINDER	FAIR	88				THE 1/22X24 INDENT CYLINDER REDUCED MOUSEAR TO 1400/LB, BUT WITH ONLY A
				CERASTIUM		MOUSEAR		VIBRATORY		FAIR					
492	AGROSTIS	PALUSTRIS	CHICKWEED	CERASTIUM	VISCOSUM	STICKY MOUSE-EAR	REMOVE STICKY MOUSE-EAR	SCREEN	SEQ.50X50	GOOD				VIBRATOR, ELECTROSTATIC AND PNEUMATIC WERE UNSUCCESSFUL.	SCREENING FOLLOWED BY INDENT CYLINDER YIELDED THE BEST RESULTS.
								INDENT CYLINDER	SEQ.SPECIAL INDENT CYLINDER	GOOD					
								SCREEN	.018" ROUND HOLE						
								DRAPER							
16	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	JUNCUS	BUFONIUS	TOADRUSH	REMOVE TOADRUSH.								ORIGINAL DATA SHEET FOR TRIALS WITH CARPCO ELECTRONIC UNIT SHOWED THAT TOADRUSH COULD BE CONCENTRATED IN ONE FRACTION, BUT WITH A HIGH AMOUNT OF SHRINKAGE.
50	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	PLANTAGO	MAJOR	RIPPLESEED PLANTAIN	REMOVE RIPPLESEED PLANTAIN.	VIBRATORY	FINE SANDPAPER DECK	GOOD	99	84	100		THE VIBRATOR DID THE BEST, RECLAIMING 86.4% OF THE LOT WITH 172 PLANTAIN PER POUND.
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		INDENT CYLINDER		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		ELECTROSTATIC		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		DRAPER		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		PNEUMATIC		POOR					

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51	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	PLANTAGO	MAJOR	RIPPLESEED PLANTAIN	REMOVE RIPPLESEED PLANTAIN.	PNEUMATIC		GOOD		100	100		THE BLOWER AND VIBRATOR BOTH YIELDED GOOD RESULTS. THE BLOWER LIFTED ABOUT 80% OF THE MATERIAL WITH LITTLE OR NO PLANTAIN. THE VIBRATOR SALVAGED 90% OF THE ORIGINAL MATERIAL WITH VERY LITTLE PLANTAIN.
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		VIBRATORY	FINE DECK	GOOD					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		SCREENS		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		VELVET ROLL		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		DRAPER		POOR					
432	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	PLANTAGO	MAJOR	RIPPLESEED PLANTAIN	REMOVE RIPPLESEED PLANTAIN	VIBRATORY	SANDPAPER DECK	FAIR					ONLY THE VIBRATOR MADE A SEPARATION. IT SALVAGED 83% OF THE LOT WITH 90 PLANTAIN/LB.
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		VELVET ROLL		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		PNEUMATIC		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		SCREENS		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		INDENT CYLINDER		POOR					
795	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	PLANTAGO	MAJOR	RIPPLESEED PLANTAIN	REMOVE RIPPLESEED PLANTAIN AND ST. JOHNSWORT	GRAVITY	SEQ.	FAIR					THE REQUIRED PURITY CAN BE MET USING THE GRAVITY TABLE WITH SUBSEQUENT PROCESSING OF THE FRACTIONS BY SCREENS AND SPECIAL INDENT CYLINDER.
				HYPERICUM	PERFERATUM	ST. JOHNSWORT		SCREEN	SEQ. .024" RD HOLE: GROAT FRACTION	GOOD					
446	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	POA	PALUSTRIS	FOWL BLUEGRASS	RECOMMEND MEANS TO REMOVE FOWL BLUEGRASS	INDENT CYLINDER	SEQ.1/22X24GA. INDENT CYL. MIDDLE FRACTION	GOOD					BASED ON SEED MEASUREMENTS, IT IS RECOMMENDED TO USE A .017" ROUND-HOLE SCREEN AND/OR A .016" SLOTTED SCREEN TO SCALP OF THE BIGGEST BLUEGRASS TO MEET THE .25% WEED ALLOWANCE. ABOUT 10% OF THE CROP WOULD BE LOST ALSO. OTHER METHODS APPEAR IMPOSSIBLE.
745	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	SCREEN	SEQ. 6X32 SLOTTED HOLE	GOOD					REMOVING BLUEGRASS FROM BENTGRASS IS POSSIBLE IN CONVENTIONAL EQUIPMENT.
				POA	ANNUA	ANNUAL BLUEGRASS		PNEUMATIC	SEQ. AIR=170FPM	GOOD					
88	AGROSTIS	PALUSTRIS	SEASIDE BENTGRASS	RORIPPA		CRESS	REMOVE CRESS	INDENT CYLINDER	.032"X30 GA CYLINDER	GOOD					BEST RESULTS OBTAINED WITH THE INDENT CYLINDER WHICH REMOVED MUCH CRESS ALONG WITH SOME BENTGRASS. PNEUMATIC SEPARATION WAS ALSO QUITE EFFECTIVE, BUT 10-15% OF THE BENTGRASS WAS LOST.
				RORIPPA		CRESS		VIBRATORY	VERY FINE SANDPAPER	POOR					
				RORIPPA		CRESS		PNEUMATIC		FAIR					
				RORIPPA		CRESS		ELECTROSTATIC		POOR					
363	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	CAPSELLA	BURSA-PASTORIS	SHEPHERDSPURSE	REMOVE SHEPHERDSPURSE AND PINEAPPLEWEED.	SCREEN	.02" ROUND-HOLE	GOOD					THE .020" ROUND-HOLE SCREEN SCALPED OFF MOST OF THE WEEDS WITH ONLY A SMALL LOSS OF BENTGRASS. ACCORDING TO SEED MEASUREMENTS, AN INDENT CYLINDER WITH POCKETS .046"DIA X .015"DEEP SHOULD ALSO WORK WELL.
				MATRICARIA	MATRICARIODES	PINEAPPLEWEED		SCREEN	.02" ROUND-HOLE	GOOD					
233	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	CERASTIUM		MOUSEAR	REMOVE MOUSEAR AND SILVER HAIRGRASS.	INDENT CYLINDER	1/31X30GA	GOOD					THE 1/31 X 30GA INDENT CYLINDER REDUCED MOUSEAR TO 3600/LB WITH A 93% RECOVERY OR THE ORIGINAL LOT. RERUNNING
				CERASTIUM		MOUSEAR		VIBRATORY	280 GRIT DECK	GOOD					
				AIRA	CARYOPHYLLEA	SILVER HAIRGRASS		VIBRATORY	280 GRIT DECK	GOOD					
234	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	CERASTIUM		MOUSEAR	REMOVE MOUSEAR AND SILVER HAIRGRASS.	VIBRATORY		GOOD					THE VIBRATOR EFFECTIVELY REMOVED BOTH CONTAMINANTS.
				AIRA	CARYOPHYLLEA	SILVER HAIRGRASS		VIBRATORY		GOOD					
1076	AGROSTIS	STOLONIFERA	COLONIAL BENTGRASS	CERASTIUM	VISCOSUM	STICKY CHICKWEED	REMOVE STICKY CHICKWEED	INDENT CYLINDER	1MM POCKET	GOOD		95		1MM POCKET INDENT CYLINDER REMOVED THE MAJORITY OF THE CHICKWEED ALONG WITH SOME OF THE SMALL GROATED CROP SEED. ROUND SOIL PARTICLES WERE REMOVED ALSO.	USE 1MM INDENT CYLINDER TO REMOVE CHICKWEED AND SOIL.
				SOIL		SOIL		INDENT CYLINDER	1MM POCKET	GOOD		75			
1075	AGROSTIS	STOLONIFERA	COLONIAL BENTGRASS	DAUCUS	CAROTA	WILD CARROT	REMOVE WILD CARROT, MULLEN, SPEEEDWELL	SCREEN	6X50 WW					REMOVAL OF WILD CARROT WAS MOST IMPORTANT IN THIS SAMPLE. A 6X50 WOVEN WIRE SCREEN APPEARED TO REMOVE A MAJORITY OF THE WILD CARROT WITH LOSS OF ABOUT 33 % OF THE CROP.	RESULTS ARE NOT COMPLETE
				VERBASCUM		MULLEIN		SCREEN	6X50 WW						
				VERONICA		SPEEDWELL		SCREEN	6X50 WW						
315	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	DIRT		DIRT CLODS	REMOVE DIRT CLODS.	SCREEN	SEQ..018" ROUND HOLE	GOOD					DIRT CAN BE REDUCED TO LESS THAN .5% USING THE SCREEN/INDENT CYLINDER/PNEUMATIC SEQUENCE.
				DIRT		DIRT CLODS		INDENT CYLINDER	SEQ..027"DIAMX.010"DEEP POCKETS	GOOD					
				DIRT		DIRT CLODS		PNEUMATIC	SEQ.	GOOD					
913	AGROSTIS	STOLONIFERA	CREEPING BENTGRASS	EARTHA	DIRTEA	SOIL	REMOVE SOIL USING MAGNETIC SEPARATOR. COMPARE PERFORMANCE OF MAGNETIC FLUID WITH IRON POWDER.	MAGNETIC	MAGNETIC FLUID			93			SOIL IN CREEPING BENTGRASS WAS REDUCED BY 93% WITH MAGNETIC FLUID AND 44% BY MAGNETIC POWDER.
				EARTHA	DIRTEA	SOIL		MAGNETIC	MAGNETIC POWDER			44			
1083	AGROSTIS	STOLONIFERA	BENTGRASS	EPILOBIUM		WILLOWHERB	REMOVE WILLOWHERB AND OTHER WEEDS	INDENT CYLINDER	SEQ 1.35MM POCKET	FAIR	96	66	99	THIS SAMPLE C	USE 1.35 MM INDENT CYLINDER FOLLOWED BY 36X36 WW SCREEN TO REMOVE WILLOWHERB AND OTHER WEEDS.
				EPILOBIUM		WILLOWHERB		SCREENS	SEQ 36X36 WW	FAIR	96	66	99		

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541	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	ERGOT		ERGOT	REMOVE ERGOT.	INDENT CYLINDER	1/19X24GA SPECIAL INDENT	POOR	100		100	ERGOT CONCENTRATION NEEDED TO BE BELOW .004% FOR THE EXPORT OF THIS LOT. THE VELVET ROLLS AND BOUNCE PLATE WERE INEFFECTIVE IN THIS SEPARATION.	ALTHOUGH IT WAS POSSIBLE TO REMOVE SOME ERGOT (AT THE EXPENSE OF CONSIDERABLE CROP LOSS), THE LOW LEVEL OF .004% COULD NOT BE REACHED. THE BEST SEPARATIO
				ERGOT		ERGOT		PNEUMATIC	230 FPM	POOR	100		100		
				ERGOT		ERGOT		ELECTROSTATIC	18 KV, ELECTRODE LIFTED	POOR	100		100		
				ERGOT		ERGOT		MAGNETIC	#6 POWDER	FAIR	100		100		
				ERGOT		ERGOT		VIBRATORY	180 GRIT	FAIR	100		100		
				ERGOT		ERGOT		INDENT CYLINDER	SEQ.1/19X24GA SPECIAL INDENT						
				ERGOT		ERGOT		MAGNETIC	SEQ.	FAIR					
771	AGROSTIS	STOLONIFERA	BENTGRASS, CREEPING	INERT		INERT	REMOVE INERT MATERIAL: SOIL	OTHER	SEQ. SQUEEZE ROLLER USED					ALLOWABLE AMOUNT OF SOIL IN THE SAMPLE WAS 0% (FOR OVERSEAS EXPORT). SQUEEZE ROLLERS WERE USED TO CRUSH THE SOIL BEFORE SCREENING.	THE SQUEEZE ROLLERS AND MAGNETIC SEPARATOR (AND TO A LESSER DEGREE; THE GRAVITY TABLE, FRICTION SEP. AND DISSOLVING THE SOIL IN WATER) WERE EFFECTIVE IN LOWERING THE PERCENTAGE OF SOIL IN THE SAMPLE, BUT NONE WAS ABLE TO ELIMINATE IT ENTIRELY AS REQUIRED.
				INERT		INERT		PNEUMATIC	SEQ.						
				INERT		INERT		SCREEN	SEQ.	FAIR	100	55	100		
				INERT		INERT		MAGNETIC	FERROMAGNETIC LIGNOSULFATE SOLN. USED.	FAIR	100	82	100		
185	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	JUNCUS	BUFONIUS	TOADRUSH	REMOVE TOADRUSH	INDENT CYLINDER	.027"DIAMX.012"DEEP POCKETS	POOR					THE 50X50 WIR
				JUNCUS	BUFONIUS	TOADRUSH		SCREEN	50X50 WIRE MESH	FAIR		82			
				JUNCUS	BUFONIUS	TOADRUSH		ELECTROSTATIC		POOR					
				JUNCUS	BUFONIUS	TOADRUSH		DRAPER		POOR					
				JUNCUS	BUFONIUS	TOADRUSN		VIBRATORY		POOR					
1133	AGROSTIS	STOLONIFERA	CREEPING BENTGRASS	MATRICARIA	MATRICARIOIDES	PINEAPPLE WEED	REMOVE PINEAPPLE WEED	SCREEN	6X50WW DROPPED CONTAMINANT	FAIR	1.2	100	100	LOT NEEDS TO BE 99% PURE. PINEAPPLE WEED MAKES UP THE LARGEST PERCENTAGE OF THE CONTAMINANTS. SHEPARDS PURSE IS	USE 6X50 WW SCREEN TO SPLIT THE LOT. THEN BLEND THE FRACTIONS BACK TOGETHER IN THE CORRECT PROPORTIONS.
413	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	PLANTAGO	MAJOR	RIPPLESEED PLANTAIN	REMOVE RIPPLESEED PLANTAIN	VIBRATORY	SANDPAPER DECK	GOOD		100	100		GOOD RESULTS WERE ONLY OBTAINED ON THE VIBRATOR WHICH SALVAGED 85% OF THE LOT FREE OF PLANTAIN.
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		SCREENS	VARIOUS	POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		INDENT CYLINDER		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		PNEUMATIC		POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		DRAPER		POOR					
828	AGROSTIS	STOLONIFERA	CREEPING BENTGRASS	PLANTAGO	MAJOR	RIPPLESEED PLANTAIN	REMOVE RIPPLESEED PLANTAIN	MAGNETIC	MAGNETIC FLUID						FRACTIONS WERE GIVEN TO SUBMITTER FOR EVALUATION.
1239	AGROSTIS	STOLONIFERA	BENTGRASS	PLANTAGO	MAJOR	RIPPLESEEDED PLANTAIN	REMOVE RIPPLE SEEDED PLANTAIN							THIS	
211	AGROSTIS	STOLONIFERA	PENNCROSS BLUEGRASS	POA	PRATENSIS	MERION BLUEGRASS	REMOVE GROATS OF MERION BLUEGRASS								SEPARATING TRIALS WERE NOT CARRIED OUT, BUT SEED MEASUREMENTS INDICATE EXTENSIVE OVERLAP OF ALL SEED DIMENSION.
770	AGROSTIS	STOLONIFERA	BENTGRASS, SEASIDE	POA	PALUSTRIS	FOWL BLUEGRASS	REMOVE FOWL BLUEGRASS AND WINDGRASS.	SCREEN		POOR					PNEUMATIC SEPARATION SEEMED TO OFFER THE BEST SELECTIVITY WITH RESPECT TO WINDGRASS OF ANY OF THE TECHNIQUES TRIED, HOWEVER, THE REQUIRED PURITY OF 99.92% IS PROBABLY IMPOSSIBLE WITH CONVENTIONAL TECHNIQUES.
								ELECTROSTATIC		POOR					
				APERA	SPICA-VENTI	WINDGRASS		PNEUMATIC		POOR					
1048	AGROSTIS	STOLONIFERA	CREEPING BENTGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	SCREENS	40X40 WW 6X50WW 6X42 WW 38X38WW	GOOD				THIS TEST WAS RUN WITH SAMPLES FROM OUR HERBARIUM. SCREENS THAT WERE SELECTED WERE TESTED TO SEE IF THEY WOULD HOLD ANNUAL BLUEGRASS AND DROP BENTGRASS.	USE SCREENS TO REMOVE ANNUAL BLUEGRASS FROM BENTGRASS
1093	AGROSTIS	STOLONIFERA	BENTGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE POA ANNUA AND HYPERICUM PERFORATUM	ELECTROSTATIC	PINNING-LIFTED FRACTION	FAIR				TWO NOXIOUS WEEDS WERE PRESENT IN THESE SEED LOTS. OTHER WEED SEED INCLUDING PINEAPPLE WEED, SHEPARDS PURSE, AND SKUNKWEED WERE ALSO PRESENT IN VARYING QUANTITIES. BOTH NOXIOUS SPECIES OCCURRED AT VERY LOW LEVELS MAKING RESULTS OF TESTS QUESTIONABLE.	USE 6X50 WOVEN WIRE SCREEN TO REMOVE ANNUAL BLUEGRASS FROM BENTGRASS. USE 6X50 WOVEN WIRE SCREEN AND/OR 1MM INDENT CYLINDER TO REMOVE ST.JOHNSWORT.
				POA	ANNUA	ANNUAL BLUEGRASS		INDENT CYLINDER	1MM-UNLIFTED FRACTION	POOR					
				POA	ANNUA	ANNUAL BLUEGRASS		SCREEN	6X50 WW THRU FRACTION	GOOD		100			
				HYPERICUM	PERFORATUM	ST. JOHNS WORT		ELECTROSTATIC	PINNING-LIFTED FRACTION	POOR		0			
				HYPERICUM	PERFORATUM	ST. JOHNS WORT		INDENT CYLINDER	1MM-UNLIFTED FRACTION	GOOD		100			
				HYPERICUM	PERFORATUM	ST. JOHNS WORT		SCREEN	6X50 WW-THRU FRACTION	GOOD		100			

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
445	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	SENECIO	JACOBEAE	TANSY RAGWORT	RECOMMEND METHOD TO REMOVE TANSY RAGWORT.								A .018" ROUND-HOLE SCREEN MIGHT SCALP OF THE TANSY, BUT IT WOULD BE SLOW. A 6X40 OR 6X42 SLOT APPEARS TO BE ABLE TO HOLD THE TANSY AND DROP THE BENTGRASS.
204	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	SPERGULARIA	RUBRA	RED SANDSPURRY	REMOVE RED SANDSPURRY	INDENT CYLINDER	.027"X.012" POCKETS	GOOD					NO ANALYSIS WAS MADE, BUT OBSERVATIONS INDICATED GOOD RESULTS WITH THE .027"X.012" INDENT CYLINDER. BASED ON SEED MEASUREMENTS, A .027"X.010" INDENT WOULD BE IDEAL.
150	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS	WEEDS		WEEDS	REDUCE ASSORTED WEED CONTENT.	VIBRATORY	FINE TEXTURED DECK	GOOD	100	90	100		BEST RESULTS WERE OBTAINED WITH THE VIBRATOR SEPARATOR. 80% OF THE LOT WAS RECOVERED AT A 99.98% PURITY.
				MORE WEEDS		MORE WEEDS		INDENT CYLINDER	.032"X30 GA CYLINDER	FAIR	100	50	100		
				WEEDS		WEEDS		SCREENS	40X40 OVER 50X50	FAIR	100	46	100		
				WEEDS		WEEDS		ELECTROSTATIC		POOR					
				WEEDS		WEEDS		VELVET ROLL		POOR					
202	AGROSTIS	STOLONIFERA	PENNCROSS BENTGRASS				REMOVE SHEPHERDSPURSE								NO SEPARATIONS WERE ATTEMPTED. ACCORDING TO SEED MEASUREMENTS, AN INDENT CYLINDER WITH .046"DIAMX.012" TO .018"DEPTH POCKETS SHOULD SAVE 95% OF THE ORIGINAL LOT FREE OF SHEPHERDSPURSE. A CYLINDER WITH THESE DIMENSIONS WAS NOT AVAILABLE.
262	AGROSTIS	TENUIS	ASTORIA BENTGRASS	AGROSTIS	EXARATA	SPIKE BENTGRASS	REMOVE SPIKE BENTGRASS	PNEUMATIC		FAIR	97	50	98		SPIKE BENTGRASS IS LIFTED MORE READILY THAN ASTORIA BENTGRASS IN THE PNEUMATIC SEPARATOR AND WILL ALSO TEND TO CONCENTRATE IN THE LIGHT FRACTION ON THE GRAVITY TABLE.
				AGROSTIS	EXARATA	SPIKE BENTGRASS		GRAVITY	COURSE CLOTH DECK	FAIR	97	28	98		
				AGROSTIS	EXARATA	SPIKE BENTGRASS		ELECTROSTATIC		POOR					
				AGROSTIS	EXARATA	SPIKE BENTGRASS		SCREENS	VARIOUS	POOR					
329	AGROSTIS	TENUIS	ASTORIA BENTGRASS	AGROSTIS	EXARATA	SPIKE BENTGRASS	REMOVE SPIKE BENTGRASS.	VIBRATORY		FAIR	97	42	98		NO SEPARATION METHOD REDUCED THE SPIKE BENTGRASS TO THE REQUIRED .25%. THE BEST THAT COULD BE DONE WAS WITH THE VIBRATOR IN COMBINATION WITH THE ESM PNEUMATIC SEPARATOR WHICH SALVAGED 78% OF THE CROP WITH 1.4% SPIKE BENTGRASS.
				AGROSTIS	EXARATA	SPIKE BENTGRASS		VIBRATORY	SEQ.						
				AGROSTIS	EXARATA	SPIKE BENTGRASS		PNEUMATIC	SEQ.	FAIR	97	52	99		
				AGROSTIS	EXARATA	SPIKE BENTGRASS				POOR					
				AGROSTIS	EXARATA	SPIKE BENTGRASS	VELVET ROLL			POOR					
405	AGROSTIS	TENUIS	HIGHLAND BENTGRASS	AGROSTIS	EXARATA	SPIKE BENTGRASS	GRAVITY								MEASUREMENTS ONLY.
1053	AGROSTIS	TENUIS	HIGHLAND BENTGRASS	AGROSTIS	EXARATA	SPIKE BENTGRASS	REMOVE SPIKE BENTGRASS, WILD CARROT, RATTAIL FESCUE	SCREEN	6X42	FAIR		50		NO WILD CARROT OR RATTAIL FESCUE WAS FOUND.	USE 6X50 WW SCREEN TO REMOVE SPIKE BENTGRASS FROM HIGHLAND BENTGRASS. RECLEAN THE HELD FRACTION (ABOUT 60%)
								SCREEN	6X50	FAIR		90			
				AGROSTIS	EXARATA	SPIKE BENTGRASS									
208	AGROSTIS	TENUIS	COLONIAL BENTGRASS	AIRA	CARYOPHYLLEA	SILVER HAIRGRASS	REMOVE SILVER HAIRGRASS	ELECTROSTATIC		POOR				AN ATTEMPT WAS MADE TO REMOVE THE AWNS IN HOPES THAT THE SEED COULD THEN BE SEPARATED, BUT 5 HOURS IN A JAMES DEBEARDER COULD NOT TOTALLY REMOVE THE AWNS.	NO ACCEPTABLE SEPARATION COULD BE MADE. IF THE AWNS COULD BE REMOVED FROM THE HAIRGRASS, IT MIGHT BE POSSIBLE, BUT AN ATTEMPT TO DO THIS WAS UNSUCCESSFUL.
				AIRA	CARYOPHYLLEA	SILVER HAIRGRASS		GRAVITY	CLOTH AND PERF METAL DECKS	POOR					
				AIRA	CARYOPHYLLEA	SILVER HAIRGRASS		SPIRAL		POOR					
				AIRA	CARYOPHYLLEA	SILVER HAIRGRASS		VELVET ROLL		POOR					
				AIRA	CARYOPHYLLEA	SILVER HAIRGRASS		VIBRATORY	CROCUS CLOTH & SANDPAPER DECKS	POOR					
270	AGROSTIS	TENUIS	HIGHLAND BENTGRASS	AIRA	CARYOPHYLLEA	SILVER HAIRGRASS	REMOVE SILVER HAIRGRASS AND HAIRGRASS.	VIBRATORY	FINE SANDPAPER DECK	GOOD					THE VIBRATOR YIELDED EXCELLENT RESULTS WITH 80% OF THE LOT ESSENTIALLY WEED FREE AND ANOTHER 10% WITH AN OCCASIONAL WEED.
								VIBRATORY	FINE SANDPAPER DECK	GOOD					
								PNEUMATIC		POOR					
								PNEUMATIC		POOR					
				AIRA	CARYOPHYLLEA	SILVER HAIRGRASS									
167	AGROSTIS	TENUIS	ASTORIA BENTGRASS	CERASTIUM	VULGATUM	MOUSEAR CHICKWEED	REMOVE BIG MOUSE-EAR	INDENT CYLINDER	1/25 X 24GA CYLINDER	GOOD				THE PNEUMATIC SEPARATOR MADE A DEFINITE SEPARATION, BUT THE FRACTIONS WERE NOT ANALYZED.	THE INDENT CYLINDER MADE A GOOD SEPARATION, RECOVERING 80% OF THE CROP WITH 66 MOUSEAR/GRAM.
				CERASTIUM	VULGATUM	MOUSEAR CHICKWEED		PNEUMATIC							
				CERASTIUM	VULGATUM	MOUSEAR CHICKWEED		ELECTROSTATIC		POOR					
				CERASTIUM	VULGATUM	MOUSEAR CHICKWEED		VIBRATORY		POOR					
				CERASTIUM	VULGATUM	MOUSEAR CHICKWEED		VELVET ROLL		POOR					

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242	AGROSTIS	TENUIS	ASTORIA BENTGRASS	CERASTIUM	VULGATUM	BIG MOUSEAR	A 1/25X24GA INDENT CYLINDER HAD BEEN RECOMMENDED IN PS#167 TO REMOVE BIG MOUSEAR FROM BENTGRASS. VERY FAVORABLE REPORTS WERE RECIEVED, BUT NOW IT WAS NOT REMOVING ALL THE MOUSEAR. NEW SEED MEASUREMENTS AND A RECOMMENDATION WERE REQUESTED.								
267	AGROSTIS	TENUIS	ASTORIA BENTGRASS	ERGOT		ERGOT	REMOVE ERGOT	ELECTROSTATIC	SEQ.PINNED FRACT RUN 5 TIMES	FAIR					NO ACCEPTABLE RESULTS WERE OBTAINED ALTHOUGH 5 PASSES ON THE ELECTROSTATIC FOLLOWED BY 3 PASSES ON THE VIBRATOR SEPARATORS YIELDED A CLEAN FRACTION THAT WAS 74% OF THE ORIGINAL LOT.
				ERGOT		ERGOT		VIBRATORY	SEQ.3 PASSES	FAIR					
				ERGOT		ERGOT		PNEUMATIC		POOR					
				ERGOT		ERGOT		GRAVITY		POOR					
440	AGROSTIS	TENUIS	ASTORIA BENTGRASS	ERGOT		ERGOT	REMOVE ERGOT	PNEUMATIC		POOR				ALL DIMENSIONS ARE SO SIMILAR THAT A SIZE SEPARATION IS NOT POSSIBLE.	NO SUCCESS WITH THIS PROBLEM.
				ERGOT		ERGOT		ELECTROSTATIC		POOR					
				ERGOT		ERGOT		MAGNETIC		POOR					
49	AGROSTIS	TENUIS	ASTORIA BENTGRASS	INERT		INERT	REMOVE INERT MATERIAL (MOSTLY ERGOTIZED SEED AND SOME STEMS AND STRAW).	PNEUMATIC	SEQ.						RESULTS WERE POOR. THE BEST BEING THE PNEUMATIC/SCREEN SEQUENCE WHICH SALVAGED ABOUT 15% OF THE LOT AS NEARLY PURE BENTGRASS.
				INERT		INERT		SCREEN	SEQ.45X45	FAIR					
				INERT		INERT		VELVET ROLL		POOR					
				INERT		INERT		SCREENS		POOR					
				INERT		INERT		ELECTROSTATIC		POOR					
				INERT		INERT		GRAVITY		POOR					
				INERT		INERT		VIBRATORY		POOR					
727	AGROSTIS	TENUIS	GOGINAN COLONIAL BENTGRASS	INERT		INERT	REMOVE INERT MATTER WHICH IS 6.34% OF TOTAL WEIGHT. CONSISTS OF LIGHT MATERIAL (HULLS AND CHAFF) AND HEAVY MATERIAL (DIRT CLODS AND SAND PARTICLES).	PNEUMATIC	SEQ SDB 175 FPM	GOOD	94	85	99	GRAVITY TABLE WAS ALSO TRIED BUT BECAUSE OF SMALL SAMPLE SIZE RESULTS WERE NOT CONCLUSIVE.	OPTIMIZATION OF PNEUMATIC OF GRAVITY COULD YIELD HIGH PURITY PRODUCT. FRICTION YIELDS CLEANER PRODUCT BUT INCREASED LOSS.
				INERT		INERT		PNEUMATIC	SEQ SDB 275 FPM	GOOD	94	85	99		
				INERT		INERT		FRICTION	4 PASSES ON NAUGAHIDE BELT AND VINYL SEPARATOR BAR INCLINED 14 DEGREES	FAIR	94	90	100		
731	AGROSTIS	TENUIS	COLONIAL BENTGRASS	INERT		DIRT CLODS, SAND	REMOVE INERT MATERIAL	GRAVITY	FINE TEXTURED DECK						GRAVITY TABLE CAN BE USED TO REMOVE DIRT AND SAND FROM VERY SMALL SEED USING PROPER OPERATING CONDITIONS.
1051	AGROSTIS	TENUIS	COLONIAL BENTGRASS	INERT		CHAFF	REMOVE INERT	SCREENS	SEQ 50X50 WW 6X36 WW	GOOD	70		94	A SEQUENCE OF SCREENS FOLLOWED BY PNEUMTIC SEPARATION REMOVED A LARGE PORTION OF THE INERT MATERIAL IN THIS SAMPLE.	USE SCREENS AND PNEUMATIC TO REMOVE CHAFF FROM BENTGRASS.
				INERT		CHAFF		PNEUMATIC	SEQ SDB	GOOD	70		94		
277	AGROSTIS	TENUIS	ASTORIA BENTGRASS	POA	TRIVIALIS	ROUGH BLUEGRASS	REMOVE ROUGH BLUEGRASS.	VIBRATORY	600 SANDPAPER DECK	FAIR					THE VIBRATOR PERFORMED THE BEST YIELDING 93% OF THE SAMPLE WITH VERY FEW BLUEGRASS. THE INDENT CYLINDER YIELDED 89% WITH FEW BLUEGRASS.
				POA	TRIVIALIS	ROUGH BLUEGRASS		INDENT CYLINDER	.069"X.025" CYLINDER	FAIR					
				POA	TRIVIALIS	ROUGH BLUEGRASS		PNEUMATIC		POOR					
				POA	TRIVIALIS	ROUGH BLUEGRASS		GRAVITY		POOR					
909	AGROSTIS	TENUIS	HIGHLAND BENTGRASS	RORIPPA	CURVISILIQUA	WESTERN YELLOWCRESS	REMOVE WESTERN YELLOWCRESS	INDENT CYLINDER	.032 SPECIAL INDENT						THE .032 SPECIAL INDENT CYLINDER ALMOST COMPLETELY REMOVED THE YELLOWCRESS WITH 20% SHRINKAGE AND THE 1MM KAMAS-WESTRUP INDENT CYLINDER ALMOST COMPLETELY REMOVED THE YELLOWCRESS WITH 40% SHRINKAGE.
								INDENT CYLINDER	1 MM KAMAS-WESTRUP INDENT						
308	AGROSTIS	TENUIS	ASTORIA BENTGRASS	VARIOUS		VARIOUS	REMOVE INERT MATERIAL, CROP SEEDS, MOUSE-EAR, TOADRUSH, SPEEDWELL, ETC.	INDENT CYLINDER	SEQ..032"X.012" CYLINDER	GOOD					THE FINAL SAMPLE APPEARED TO BE FREE OF WEEDS AFTER RUNNING THE LOT IN A .032"X.012" INDENT CYLINDER AND A 1/32 ROUND HOLE SCREEN.
				VARIOUS		VARIOUS		SCREEN	SEQ.1/32 ROUND HOLE	GOOD					
283	AGROSTIS	TENUIS	ASTORIA BENTGRASS				REMOVE SPIKE BENTGRASS								NO TRIALS WERE PERFORMED BECAUSE MUCH TIME HAD BEEN SPENT ON THE SAME PROBLEM WITH OTHER BENTGRASS SAMPLES, WITH NO SUCCESS.
441	AGROSTIS		HOLFIOR BENTGRASS	AIRA	CARYOPHYLLEA	SILVER HAIRGRASS	REMOVE SILVER HAIRGRASS	VIBRATORY		FAIR				BECAUSE SEED DIMENSIONS ARE SO SIMILAR, SEPARATION BASED ON DIMENSIONS IS NOT POSSIBLE.	THE VIBRATOR CONCENTRATED THE SILVER HAIRGRASS IN THE UPHILL FRACTION.

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726	AGROSTIS		PARY'S MT. BENTGRASS	APERA	SPICA-VENTI	WINDGRASS	REMOVE WINDGRASS AND OTHER MISCELLANEOUS CONTAMINANTS	GRAVITY	DECK TEXTURE=FINE CLOTH, AIR=1.5, ENDSLOPE=12, SPEED=650, BACKSLOPE=1	GOOD	94	75	99	INITIAL TESTS USED FRICTION SEPARATOR, SCREENS AND PNEUMATIC SEPARATOR BUT GRAVITY TABLE GAVE BEST RESULTS.	CONTAMINANT LEVELS FOR THIS SAMPLE SHOULD BE ABOUT 1% IN THE CLEANED PORTION USING THE GRAVITY TABLE
				HOLOSTEUM	UMBELLATUM	JAGGED CHICKWEED		GRAVITY	DECK TEXTURE=FINE CLOTH	GOOD			99		
				VULPIA	MYUROS	RATTAIL FESCUE		GRAVITY		GOOD			99		
				CAPSELLA	BURSA-PASTORIS	SHEPHERDS PURSE		GRAVITY		GOOD			99		
				PUCINELLIA		ALKILIGRASS		GRAVITY		GOOD		100	99		
561	AGROSTIS		BENTGRASS	CAPSELLA	BURSA-PASTORIS	SHEPHERDS PURSE	REMOVE SHEPHERDS PURSE.	GRAVITY		GOOD		100	100		GOOD RESULTS WERE OBTAINED WITH THE GRAVITY TABLE AND PNEUMATIC SEPARATORS
				CAPSELLA	BURSA-PASTORIS	SHEPHERDS PURSE		PNEUMATIC		GOOD					
				CAPSELLA	BURSA-PASTORIS	SHEPHERDS PURSE		SCREENS	.024 OVER .020 ROUND-HOLE						
				CAPSELLA	BURSA-PASTORIS	SHEPHERDS PURSE		AIR-SCREEN	.024 OVER .020 ROUND-HOLE						
500	AGROSTIS		ENATE BENTGRASS	CERASTIUM	VISCOSUM	STICKY MOUSE-EAR	REMOVE SILVER HAIRGRASS AND STICKY MOUSE-EAR.	INDENT CYLINDER	SEQ.SPECIAL INDENT CYLINDER	GOOD					A GOOD SEPARATION WAS ACHIEVED USING THE ABOVE SEQUENCE. THE FINAL CLEAN CROP YIELD WAS ABOUT TWO-THIRDS OF THE ORIGINAL LOT AND CONTAINED LESS THAN 0.5% TOTAL WEED CONTENT.
				AIRA	CARYOPHILLEA	SILVER HAIRGRASS		VIBRATORY	SEQ.135 GRIT SANDPAPER DECK	GOOD					
337	AGROSTIS		EXETER BENTGRASS	DIRT CLODS		DIRT CLODS	REMOVE DIRT CLODS.	INDENT CYLINDER	.032"X.012" CYLINDER	GOOD	97	84	100		EXCELLENT RESULTS WITH THE .032"DIA X .012"DEEP INDENT CYLINDER WHICH YIELDED 96% OF THE CROP AT 99.5% PURITY.
				DIRT CLODS		DIRT CLODS	REMOVE DIRT CLODS.	GRAVITY		FAIR					
				DIRT CLODS		DIRT CLODS	REMOVE DIRT CLODS.	SCREENS		POOR					
				DIRT CLODS		DIRT CLODS	REMOVE DIRT CLODS.	VELVET ROLL		POOR					
							REMOVE DIRT CLODS.								
702	AGROSTIS		BENTGRASS	HOLCUS	LANATUS	VELVET GRASS	REMOVE VELVET GRASS	GRAVITY		FAIR				PNEUMATIC, BOUNCE PLATE AND VIBRATION SEPARATORS WERE ALSO ABLE TO SIGNIFICANTLY REDUCE THE CONTAMINANT. THE SPIRAL, DRAPER, VELVET ROLL AND SCREENS WERE UNSUCCESSFUL.	THE GRAVITY TABLE, PNEUMATIC, BOUNCE PLATE AND VIBRATOR SEPARATORS WERE ABLE TO SIGNIFICANTLY REDUCE THE CONTAMINANT.
580	AGROSTIS		EMERALD BENTGRASS	INERT		INERT	REMOVE DIRT CLODS	OTHER	SEQ. CRUSHING ROLLS: WOOD/RUBBER	GOOD				GRAVITY TABLE, PNEUMATIC, VELVET ROLL, AND MAGNETIC SEPARATORS WERE TRIED WITH NO SUCCESS. THE FRICTION SEPARATOR SHOWER SOME PROMISE, BUT NOT ENOUGH.	A VERY SUCCESSFUL METHOD TO REMOVE THE DIRT CLODS FROM THE BENTGRASS WAS TO CRUSH THE CLODS WITH THE CRUSHING ROLLS (A HARDWOODROLL WITH A FIRM RUBBER ROLL) AND THEN SCREEN WITH A 60X60 SCREEN. SOME GROAT DAMAGE DID OCCUR.
				INERT		INERT		SCREEN	SEQ. 60X60 WIRE MESH	GOOD					
725	AGROSTIS		BENTGRASS	INERT	BUFONIUS	TOADRUSH	DETERMINE PROPER INDENT SIZE TO REMOVE TOADRUSH.								BASED ON SEED MEASUREMENTS, .027 X .011 INCH PERFORATED METAL WAS RECOMMENDED FOR CONSTRUCTION OF A SPECIAL INDENT CYLINDER.
897	AGROSTIS		BENTGRASS	JUNCUS	BUFONIUS	TOADRUSH	REMOVE TOADRUSH	SCREENS	.024 OVER .020 ROUND-HOLE	GOOD	75				A .024" ROUND HOLE SCREEN RECOVERED 54% OF THE MATERIAL WITH 1% TOADRUSH. THE .020" SCREEN RECOVERED AN ADDITIONAL 20% OF THE MATERIAL WITH 10% TOADRUSH AND THE REMAINING THROUGH FRACTION WAS 26% OF THE MATERIAL WITH 80% TOADRUSH.
				JUNCUS	BUFONIUS	TOADRUSH		SPIRAL		POOR					
				JUNCUS	BUFONIUS	TOADRUSH		DRAPER		POOR					
				JUNCUS	BUFONIUS	TOADRUSH		GRAVITY							
620	AGROSTIS		BENTGRASS, PENNCROSS	MATRICARIA	MATRICARIOIDES	PINEAPPLE WEED	REMOVE PINEAPPLE WEED	SCREENS	POOR	POOR	98			THIS REPORT COMBINES PROBLEM SAMPLE NOS. 620A AND 620B WHICH ARE FROM THE SAME SUBMITTER FOR THE SAME PROBLEM LOT.	THE TRIALS WERE INEFFECTIVE, BUT IT WAS RECOMMENDED TO SUBMITTER TO TRY THE AIR SCREEN TO LIFT SATISFACTORILY PURE FRACTION AND RUN THE AIR-DROPPED FRACTION ON THE GRAVITY TABLE.
485	AGROSTIS		EMERALD BENTGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	PNEUMATIC		POOR	98				SUBMITTER INTENDED TO CONTACT SEED LAB TO GET OFFICIAL SAMPLE OF THE BLUEGRASS FOR USE IN MEASURING AND SEPARATING TRIALS, BUT WAS NOT HEARD FROM.
399	AGROSTIS		BENTGRASS	RUMEX		DOCK	REMOVE DOCK	ELECTROSTATIC		POOR	98				THE RECOMMENDATION IS TO SCREEN WITH A 38X38, THEN, TO RECOVER MORE BENTGRASS, PUT THE OVER FRACTION ON THE GRAVITY TABLE, AND FINALLY, PUT THE LOWER FRACTION ON THE ELECTROSTATIC SEPARATOR.
470	AGROSTIS		BENTGRASS	RUMEX	PURSICARIOIDES	GOLDEN DOCK	REMOVE GOLDEN DOCK AND RIPPLESEED PLANTAIN.	GRAVITY	.02" ROUND-HOLE	GOOD	98			THIS SAMPLE HAD BEEN THROUGH A 6X40 SCREEN.	A .020" ROUND HOLE SCREEN DROPPED 98% OF THE LOT WITH ONLY ONE DOCK AND ONE PLANTAIN SEED PASSING THROUGH WITH THE SMALL SAMPLE OF BENTGRASS.
								ELECTROSTATIC	POOR	POOR					
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN		PNEUMATIC		POOR					
471	AGROSTIS		BENTGRASS	RUMEX	PERSICARIOIDES	GOLDEN DOCK	REMOVE GOLDEN DOCK AND RIPPLESEED PLANTAIN	SCREEN	.020" ROUND-HOLE	GOOD				THIS SAMPLE HAD BEEN THROUGH A 40X40 SCREEN.	A .020" ROUND HOLE SCREEN DROPPED 98% OF THE LOT WITH VERY LITTLE OF THE CONTAMINANT PASSING THROUGH WITH THE CROP.
				PLANTAGO	MAJOR	RIPPLESEED PLANTAIN									

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544	AGROSTIS		BENTGRASS	SPERGULARIA	RUBRA	SANDSPURRY	REMOVE SANDSPURRY AND PINEAPPLE WEED.	VIBRATORY		POOR					RUNNING THE LOT THOUGH AN AIR-SCREEN MACHINE WITH AIR ADJUSTED TO LIFT ABOUT 15% OF THE LOT MAY REMOVE ENOUGH OF THE SANDSPURRY TO MAKE THE BENTGRASS AC
				MATRICARIA	MATRICARIODES	PINEAPPLEWEED		PNEUMATIC		FAIR					
901	AGROSTIS		BENTGRASS			STICKY CHICKWEED									
1223	AGROSTIS		BENTGRASS												
240	ALLIUM	CEPA	ONION	ALLIUM	CEPA	HEADS	REMOVE HEADS OR PODS.	SCREEN	SEQ1.6-1/2 ROUND-HOLE	GOOD				THE VELVET ROLL AND VIBRATOR WERE UNSUCCESSFUL. TWO OTHER SEQUENCES WERE TRIED, (6-1/2RH)/(1/13)/(PNEUMATIC) AND (6-1/2RH)/(PNEUMATIC)/(ELECTROSTATIC), BUT YIELDS WERE NO MORE THAN 80%.	THE BEST RESULTS, A 95% YIELD, WERE WITH THE 6-1/2RH/ELECTROSTATIC SEQUENCE. A 90% YIELD WAS ACHIEVED WITH THE RUBBING/PNEUMATIC/ELECTROSTATIC SEQUENCE.
				ALLIUM	CEPA	HEADS		ELECTROSTATIC	SEQ1.21.5KV,VER=10.5,HOR=6.75,ROT=2.5,105DEG	GOOD					
				ALLIUM	CEPA	HEADS		OTHER	SEQ2.RUB TO BREAK DOWN HEADS	GOOD					
				ALLIUM	CEPA	HEADS		PNEUMATIC	SEQ2.	GOOD					
				ALLIUM	CEPA	HEADS		ELECTROSTATIC	SEQ2.21.5KV,VER=10.5,HOR=6.75,ROT=2.5,105DEG	GOOD					
227	ALLIUM	CEPA	ONION	ANTHEMIS	COTULA	DOGFENNEL	REMOVE DOGFENNEL AND INERT MATERIAL.	ELECTROSTATIC	20.8KV,HOR=5.75,VER=10.75,ROT=.55	GOOD					THE ELECTROSTATIC SEPARATOR RECOVERED 95% OF THE ONION AS RELATIVELY CLEAN PRODUCT.
				ANTHEMIS	COTULA	DOGFENNEL		SCREENS		POOR					
				ANTHEMIS	COTULA	DOGFENNEL		PNEUMATIC		POOR					
416	ALLIUM	CEPA	ONION	CONVOLVULUS	ARVENSIS	FIELD BINDWEED	REMOVE FIELD BINDWEED	SCREENS	6-1/2 RH OVER 5/64X3/4	GOOD					THE 6-1/2 ROUND-HOLE AND 5/64X3/4 SLOTTED SCREENS REMOVED THE BINDWEED WITH ONLY A SMALL LOSS OF ONION. THE PNEUMATIC SEPARATOR WAS ABLE TO LIFT THE ONION AND DROP THE BINDWEED WITH 8% LOSS.
				CONVOLVULUS	ARVENSIS	FIELD BINDWEED		PNEUMATIC							
70	ALLIUM	CEPA	ONION	INERT		INERT	FREE SEED FROM BURR AND REMOVE STEM, CHAFF AND BURR MATERIAL.	OTHER	RUB BOARD	GOOD					EXCELLENT RESULTS WERE OBTAINED BY HAND RUBBING THE LOT AND THEN BLOWING THE LIGHT MATERIAL OFF.
				INERT		INERT		PNEUMATIC		GOOD			100		
612	ALLIUM	CEPA	ONION	INERT		INERT	REMOVE WHITE CAPS (PEDUNCLE)	MAGNETIC	POWDER #5, 13/64 DIVIDER SETTING	GOOD				SPIRAL, PNEUMATIC, AND VIBRATOR SEPARATORS WERE INEFFECTIVE.	THE MAGNETIC SEPARATOR WORKED VERY WELL, REMOVING ALMOST ALL THE WHITE CAPS WITH VERY LOW CROP LOSS.
665	ALLIUM	CEPA	ONION	INERT		INERT	THRESH AND REMOVE TRASH	BELT THRESHER	SEQ. 1/8" CLEARANCE	GOOD					NO QUANTITATIVE EVALUATIONS WERE MADE, BUT THE FINAL PRODUCT LOOKED VERY GOOD.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
688	ALLIUM	CEPA	ONION	INERT		INERT	THRESH AND REMOVE INERT MATERIAL FOR GERMINATION TESTS.	SCREEN	SEQ. #15 OVER #8 RD HOLE						FINAL SAMPLES WERE DELIVERED TO THE OSU SEED TESTING LAB FOR GERMINATION TESTS.
								OTHER	SEQ. HAND THRESHING BOARD						
								PNEUMATIC	SEQ.						
								SCREEN	SEQ. 1/19 RD-HOLE						
739	ALLIUM	CEPA	WALLA WALLA SWEET ONIONS	INERT		INERT	THRESH AND PROCESS	BELT THRESHER	SEQ. BELT SPACING=3/32"					SAMPLE WAS FIRST THRESHED WITH BELT THRESHER AND AIR-SCREEN SEQUENTIALLY, THEN TWO THRESHED SAMPLES WERE CLEANED WITH MAGNETIC AND GRAVITY MACHINES RESPECTIVELY.	DRIED ONION CAN BE SATISFACTORILY THRESHED ON THE BELT THRESHER WITH MOST INERT MATERIAL BEING REMOVED BY AIR-SEPARATOR. EITHER MAGNETIC OR GRAVITY TABLE WORK TO PROVIDE A HIGHLY PURE PRODUCT.
				INERT		INERT		AIR-SCREEN	SEQ. #8 ROUND HOLE TOP SCR, 1/14 ROUND HOLE BOTTOM SCR.						
			INERT	INERT		INERT		MAGNETIC		GOOD			100		
				INERT		INERT		GRAVITY	DECK=PERF. CU. W/RIDGES	GOOD			100		
312	ALLIUM	CEPA	ONION	PASPALUM	DILATATUM	WATERGRASS	REMOVE WATERGRASS.	VIBRATORY	SANDPAPER DECK	FAIR				SAMPLE WAS "FLOATED" MATERIAL	FAVORABLE RESULTS WERE OBTAINED WITH THE VIBRATOR, COLOR SORTER AND ELECTROSTATIC SEPARATOR. IN AN EFFORT TO IMPROVE GERMINATION, THE CLEAN ONION SEED WAS PROCESSED ON THE ELECTROSTATIC MACHINE AND PNEUMATIC SEPARATOR.
				PASPALUM	DILATATUM	WATERGRASS		ELECTROSTATIC		FAIR					
				PASPALUM	DILATATUM	WATERGRASS		COLOR SORTER		FAIR					
560	ALLIUM	CEPA	ONION				DETERMINE SIZE DISTRIBUTION OF LOT TO EXPEDITE PLANTING.								LOT WAS SEPARATED INTO SIZE FRACTIONS BY 6 1/2, 6 AND 5 1/2 ROUND-HOLE SCREENS.
622	ALLIUM	CEPA	ONION				REMOVE LONG PELLETS FROM LOT OF PELLETED ONION SEED.	SCREENS	9, 9 1/2, 8, 8 1/2						SINCE EXACT REQUIREMENTS FOR GRADING THE PELLETS WAS UNKNOWN, FRACTIONS WERE OBTAINED FROM A VARIETY OF AIR SEPARATIONS, SCREENINGS, AND AN INDENT CYLINDER SEPARATION. THESE WERE SENT TO SUBMITTER FOR EVALUATION.
								INDENT CYLINDER	#10 CYLINDER						

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656	ALLIUM	CEPA	ONION				REMOVE LOW-GERMINATION SEED.	PNEUMATIC	VARIOUS AIR FLOWS						THE ONION SEED WAS DIVIDED INTO THREE FRACTIONS ON THE GRAVITY SEPARATOR AND THREE FRACTIONS WITH THE PNEUMATIC SEPARATOR. THESE FRACTIONS WERE SENT TO THE SEED TESTING LAB FOR GERMINATIONS.
1078	ALLIUM	PORRUM	LEEK	DAUCUS	CAROTA	WILD CAROT	REMOVE RUMEX AND WILD CARROT	SCREEN	6X20	GOOD		100		6X20 ALSO REMOVED BULL THISTLE AND OTHERS	USE 6X20 WW TO RMEOVE WILD CARROT. USE 5/64 TRIANGLE TO REMOVE RUMEX.
				RUMEX				SCREEN	5/64 TRIANGLE	GOOD		90			
1154	ALNUS	RUBRA	RED ALDER	INERT		CHAFF	REMOVE INERT MATERIAL	SCREENS	6X26 TOP, 30X30 BOTTOM	GOOD				THIS WERE SAMPLES OF SEED FOR HAND PLANTING AND REQUIRED SOME	
				INERT		CHAFF		PNEUMATIC	SDB	FAIR					
564	ALNUS		ALDER	CORK		CORK	REMOVE NEEDLE-LIKE SLIVERS OF FIBER FROM FINELY GROUND GRANULAR CORK PARTICLES IN ALDER BARK. THE FIBERS ARE THE PRODUCT TO BE SAVED.	ELECTROSTATIC		POOR					ALL ATTEMPTS WERE UNSUCCESSFUL.
				CORK		CORK		PNEUMATIC		POOR					
				CORK		CORK		SCREEN	.004"NYLON	POOR					
3	ALOPECURUS	PRATENSIS	MEADOW FOXTAIL	BECMANNIA		SLOUGHGRASS	REMOVE MISCELLANEOUS CONTAMINANTS	INDENT CYLINDER	8/64 POCKET	GOOD				PNEUMATIC SEPARATION FIRST LEAVING THE SLOUGHGRASS AND MEADOW FOXTAIL THEN INDENT SEPARATION LEAVING A CLEAN FRACTION OF CROP	USE PNEUMATIC THEN INDENT CYLINDER
				VULPIA	MYUROS	RATTAIL FESCUE		PNEUMATIC	UNLIFTED FRACTION	GOOD					
				LOLIUM	PERENNE	PERENNIAL RYEGRASS		PNEUMATIC	UNLIFTED FRACTION	GOOD					
				FESTUCA	ARUNDINACEAE	TALL FESCUE		PNEUMATIC	UNLIFTED FRACTION	GOOD					
79	ALOPECURUS	PRATENSIS	MEADOW FOXTAIL	BROMUS	STERILIS	BAREN CHESS	REMOVE BARREN CHESS AND DOGFENNEL	SCREEN	4X20 WW	GOOD				MOST OF THE MATURE CHESS HAD ALREADY BEEN SCALPED OFF AND THE REMAINING CHESS WAS LARGELY IMMATURE	USE 4X20 WOVEN WIRE MESH TO REMOVE BAREN CHESS AND DOGFENNEL
				ANTHEMIS	COTULA	DOGFENNEL		SCREEN	4X20 WW	GOOD					
582	ALOPECURUS	PRATENSIS	MEADOW FOXTAIL	CAREX		SEDGE	REMOVE SEDGE, SPIKERUSH, AND KENTUCKY BLUEGRASS	PNEUMATIC		POOR				NO MENTION WAS MADE OF BLUEGRASS OR SPIKERUSH WAS MADE IN THIS REPORT.	LENGTH SEPARATION APPEARS TO BE THE BEST APPROACH.
				CAREX		SEDGE		GRAVITY		POOR					
				CAREX		SEDGE		VIBRATORY	180 GRIT	GOOD					
				CAREX		SEDGE		INDENT CYLINDER	7/64, 8/64	GOOD					
				CAREX		SEDGE		INDENT DISC	V4-1/2	GOOD					
1016	ALOPECURUS	PRATENSIS	MEADOW FOXTAIL	POA	ANNUA	ANNUAL BLUEGRASS	GENERAL INFORMATION, REMOVE ANNUAL BLUEGRASS	SCREEN	1/14 RH	GOOD				THIS TEST WAS BASED ON AN INHOUSE SAMPLE	A 1/14 INCH ROUND HOLE SCREEN REMOVED A LARGE PERCENTAGE OF THE ANNUAL BLUERGASS.
107	ALOPECURUS	PRATENSIS	MEADOW FOXTAIL	RUMEX		DOCK	REDUCE DOCK AND ALSIKE CLOVER	SCREEN	4X26 WW	GOOD		100		4X22 THROUGH 6X26 SCREENS WERE TESTED WITH BEST RESULTS FOR THIS LOT COMING FROM THE 4X26 SCREEN	4X26 WOVEN WIRE SCREEN RETAINED ALL OF THE DOCK AND MUCH OF THE ALSIKE CLOVER
				TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER		SCREEN	4X26 WW	FAIR					
813	ALOPECURUS	PRATENSIS	MEADOW FOXTAIL	RUMEX	CRISPUS	CURLY DOCK	REMOVE CURLY DOCK	INDENT CYLINDER	6/64 @5 MIN	GOOD	100	79	100	DEPENDING ON TOLERANCE FOR CROP LOSS, INDENT CYLINDER SIZES 6, 7, AND 8 (64THS) WORK WELL. PNEUMATIC COLUMN ALSO GAVE GOOD RESULTS. BEST RESULTS APPEARED TO COME FROM THE 4X22 WW SCREEN.	USE 4X22 WOVEN WIRE SCREEN TO REMOVE CURLY DOCK FROM MEADOW FOXTAIL.
				RUMEX	CRISPUS	CURLY DOCK		INDENT CYLINDER	7/64 @5 MIN	GOOD	100	86	100		
				RUMEX	CRISPUS	CURLY DOCK		INDENT CYLINDER	8/64 @5 MIN	GOOD	100	93	100		
				RUMEX	CRISPUS	CURLY DOCK		SCREEN	4X22 WW	BEST	100	93	100		
339	ALOPECURUS		CREEPING FOXTAIL	BROMUS	TECTORUM	DOWNY BROME	REMOVE DOWNY BROME	INDENT DISC	V-6 DISC	GOOD		100	100		ALL TRIALS, V-6 INDENT DISC, 1/17 SCREEN AND PNEUMATIC SEPARATOR, DID VERY WELL.
				BROMUS	TECTORUM	DOWNY BROME		SCREEN	1/17 W/DAMS	GOOD			98		
				BROMUS	TECTORUM	DOWNY BROME		PNEUMATIC		GOOD			100		
549	ALOPECURUS		CREEPING FOXTAIL	CHAFF		CHAFF	REMOVE CHAFF AND DELINT SEED.	SCREENS	SEQ.8/64 OVER 1/15 RD HOLE	GOOD					THE DELINTER, WITH THE VACUUM FAN ON, YIELDED A CLEANER SEED, BUT ALSO REMOVED SOME SEED. A FAN SPEED CONTROL IN THE VACUUM SYSTEM WOULD HAVE PROVIDED A BETTER AIR SETTING TO REDUCE SEED LOSS.
				LINT		LINT		OTHER	SEQ.COXBILL DELINTER	GOOD					
				CHAFF		CHAFF		SCREENS	SEQ.6/64 OVER 1/20 RD HOLE	GOOD					
344	ALOPECURUS		CREEPING FOXTAIL	WEEDS/STEMS		WEEDS/STEMS	REMOVE STEMS AND WEED SEEDS TO RAISE PURITY TO A MINIMUM OF 80%.	SCREENS	#8 OVER 4X30 OVER 4X36	GOOD					THE #8/4X30/4X36 SCREENING SEQUENCE RECOVERED 73% OF THE SAMPLE WITH PURITY EXCEEDING 80% PLUS PROBABLY ANOTHER 17%. THE #8/4X36/PNEUMATIC SEQUENCE RECOVERED 70% ALONG WITH ANOTHER 20% THAT PROBABLY MEETS THE PURITY REQUIREMENT.
				WEEDS/STEMS		WEEDS/STEMS		SCREENS	SEQ.#8 OVER 4X36	GOOD					
				WEEDS/STEMS		WEEDS/STEMS		PNEUMATIC	SEQ.FRACT OVER 4X36	GOOD					
				WEEDS/STEMS		WEEDS/STEMS		INDENT DISC		FAIR					

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				WEEDS/STEMS		WEEDS/STEMS		V-6-1/2 DISC		POOR					
131	ALYSSUM		ALYSSUM	AMARANTHUS		PIGWEED	REMOVE PIGWEED.	VIBRATORY	FINE TEXTURED DECK						THE PIGWEED WENT DOWNHILL ON VIBRATOR.
951	ALYSSUM		WHITE ALYSSUM	MISCELLANEOUS			GENERAL CLEANING	SCREENS						A LARGE AMOUNT OF THIS MATERIAL WAS CONTAMINANT. THE THREE MACHINES LISTED WERE USED FOR GENERAL CLEANING OF THIS SEED LOT	USE SCREENS, INDENT CYLINDER AND GRAVITY FOR GENERAL CLEANING.
				MISCELLANEOUS				INDENT CYLINDER							
				MISCELLANEOUS				GRAVITY							
1119	AMARANTHUS		AMARANTH	INERT		INERT	REMOVE PIGWEED (BLACK), STICKS, AND UNKNOWN WEED SEED. CROP IS WHITE SEED.	SCREEN	SEQ.1/15 ROUND HOLE	GOOD		90	95	SAMPLE ORIGINALLY RECIEVED IN LATE 1986. 1/16 ROUND HOLE SCREEN REMOVES STICKS. 24X24 WIRE MESH DROPS BLACK PIGWEED, BUT UNKNOWN WEED SEED STAYS WITH CROP (THE WHITE SEED).	1/15 RH SCREEN REMOV
				AMARANTHUS		BLACK PIGWEED		SCREEN	SEQ.20X20 WIRE MESH	GOOD		100	95		
				WEEDS		WEEDS		DRAPER	SEQ1.	GOOD		95	98		
				WEEDS		WEEDS		PNEUMATIC	SEQ2.	GOOD		95			
				WEEDS		WEEDS		GRAVITY	SEQ3.	GOOD		99			
				WEEDS		WEEDS		INDENT CYLINDER	SEQ4. 1.3MM INDENT	FAIR					
				WEEDS		WEEDS		VELVET ROLL	SEQ5.	FAIR					
				WEEDS		WEEDS		FRICTION		POOR					
74	AMBROSIA	ARTEMISIIFALIA	RAGWEED	AMBROSIA	ARTIMISIIFALIA	RAGWEED	DETERMINE METHOD FOR REMOVING RAGWEED SEED FROM SOIL SAMPLES TO DETERMINE EXTENT OF THE RAGWEED PROBLEM.	OTHER	RUB BOARD TO BREAK CLODS AND FREE SEED.	POOR					RESULTS OF THE
				AMBROSIA	ARTIMISIIFALIA	RAGWEED		SCREENS	WASH SAMPLE THROUGH 1/20 AND 1/24 RD HOLE						
				AMBROSIA	ARTIMISIIFALIA	RAGWEED		SCREEN	#8 TO PASS SEED IN HULL						
				AMBROSIA	ARTIMISIIFALIA	RAGWEED		PNEUMATIC	WASHED SAMPLE DRIED & BLOWN						
				AMBROSIA	ARTIMISIIFALIA	RAGWEED		OTHER	CHAFFY GRASS DIVIDER TO OBTAIN SAMPLE						
1096	AMERIA	MARITINA	AMERIA	AMERIA		AMERIA WITH FUZZ	DEFUZZ	SCARIFIER	LAH WITH #26 ROUND WIRE MANTLE AND FINE BRUSHES	GOOD				MATERIAL WAS RUN AS BATCH.	USE LAH HULLER SCARIFIER WITH #26 ROUND WIRE SCREEN
44	ANDROPOGON	HALII	SAND BLUESTEM	INERT		INERT	REMOVE STEMS, LEAVES, EMPTIES, FLORETS.	SCREENS	#12 ROUND OVER 1/22X1/2 SLOT						WORK ON THIS SAMPLE WAS NOT COMPLETED. THE FIRST TWO SCREENS REMOVED THE BULK OF THE INERT MATERIAL, BUT CLOGGED READILY. THE BLOWER/SCREEN SEQUENCE APPEARED PROMISING.
				INERT		INERT		PNEUMATIC	SEQ.						
				INERT		INERT		SCREEN	SEQ.#10 ROUND, AIR-DROPPED FRACTION						
638	ANDROPOGON		OLD WORLD BLUESTEM				DEBEARD THE SEED.	OTHER	SANDPAPER ROLLER	POOR					THE PNEUMATIC SCARIFIER WAS THE ONLY MACHINE TO YIELD GOOD RESULTS.
1111	ANEMONE	PULSATILLA	AMEMONE	AMENONE		ANEMONE IN THE HULL	DEBEARD AND CLEAN	OTHER	SANDPAPER DISKS	POOR					
843	ANEMONE		ANEMONE	FLUFF		FLUFF	REMOVE FLUFF FROM SEEDS.	BELT THRESHER		POOR					THE PNEUMATIC SCARIFIER YIELDED GOOD RESULTS AND, FROM SUBSEQUENT GERMINATION TESTS, LITTLE OR NO SEED DAMAGE RESULTED.
								SCREEN	SEQ.1/21 ROUND-HOLE	GOOD					
				FLUFF		FLUFF		SCARIFIER							
889	ANENOME		ANEMONE	INERT		INERT	THRESH AND CLEAN ANEMONE SEED.	SCARIFIER	FILAMENT						THE SEED WAS CONDITIONED WITH THE FILAMENT THRESHER. DAMAGE TO SEED IS UNKNOWN.
619	ANETHUM	GRAVEOLENS	DILL	INERT		INERT	REMOVE STEM MATERIAL	SCREENS		POOR					BASED ON THESE TRIALS AND THEIR OWN ATTEMPTS, SUBMITTER INTENDS TO TRY SCREENING WITH DAMS ON SCREEN TO UPEND STEMS AND GRAVITY TABLE.
								PNEUMATIC		POOR					
512	ANETHUM	GRAVEOLENS	DILL	TWIGA	STICKIS	STICKS	REMOVE STICKS.	SCREENS	SEQ.4X20 SLOT OVER 6X26	FAIR					A #18 INDENT CYLINDER PROBABLY WOULD HAVE DONE A BETTER JOB. THE BLOWER SHOWED ENCOURAGING RESULTS IN LIFTING LIGHT INERT MATERIAL.
				TWIGA	STICKIS	STICKS		INDENT CYLINDER	SEQ.#20 CYLINDER	FAIR					
				TWIGA	STICKIS	STICKS		PNEUMATIC		FAIR					
876	ANISUM		ANISE	INERT		INERT	CONDITION SEED, REMOVE TAILS.	AIR-SCREEN	SEQ.#10 OVER 1/14 SCREENS						SAMPLES SENT TO SUBMITTER FOR EVALUATION.
				TAILS		TAILS		BELT THRESHER	SEQ.4 PASSES						
				INERT		INERT		GRAVITY	SEQ.						
1028	ANTHOXANTHUM	ODORATUM	SWEET VERNAL GRASS	INERT		INERT	REMOVE INERT MATERIAL.	SCREENS						THIS SAMPLE WAS FROM A TEST PLOT AND CONTAINED A VERY LARGE QUANTITY OF NON SEED MATERIAL FROM THE PLANT (>90%).	
				INERT				SCARIFIER							

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132	ANTIRRHINUM		SNAPDRAGON	AMARANTHUS		PIGWEED	REMOVE PIGWEED	SCREEN	SEQ.1/24 SCREEN	GOOD					THE SCREENING, VELVET ROLL, VIBRATOR SEQUENCE PRODUCED A SAMPLE THAT WAS SATISFACTORILY CLEAN. AS A SEPARATE TRIAL, THE ELECTROSTATIC SEPARATOR PINNED THE SNAPDRAGON WITH MUCH GREATER FREQUENCY THAN THE PIGWEED.
				AMARANTHUS		PIGWEED		VELVET ROLL	SEQ.THROUGH FRACTION FROM SCREEN	GOOD					
				TRASH		TRASH		VIBRATORY	SEQ.FINE TEXTURED DECK	GOOD					
				AMARANTHUS		PIGWEED		ELECTROSTATIC	17KV, HOR-7-1/2, VERT-10-1/2, ROT=-1-3/4	GOOD					
1009	APIUM	GRAVEOLENS	CELERY	APIUM	GRAVEOLENS	CELERY	TEST ELECTROSTATIC SEPARATOR TO IMPROVE GERMINATION	ELECTROSTATIC							
1173	APIUM	GRAVEOLENS	CELERY	CHENOPODIUM	ALBUM	LAMBSQUARTERS	REMOVE WEEDS INCLUDING LAMBSQUARTERS, PIGWEED AND HAIRY NIGHTSHADE FROM CELERY. ALSO REMOVE SOIL.	SCREENS	SEQ.1/22RH THEN 6X23WW+AIR	GOOD		90		THIS MATERIAL WAS CONTAINED IN THREE LOTS WITH VARYING DEGREES OF CONTAMINATION. SCREENING FOLLOWED BY	
				AMARANTHUS		PIGWEED		SCREENS	SEQ.1/22RH THEN 6X23WW+AIR	GOOD		90			
				SOLANUM	VILLOSUM	HAIRY NIGHTSHADE		SCREENS	SEQ.1/22RH THEN 6X23WW+AIR	GOOD		100			
1125	APIUM	GRAVEOLENS	CELERY	INERTIS	STEMOIDES		SUBMITTER ASKED FOR CONTAMINANTS TO BE REMOVED, ESPECIALLY GLASS FRAGMENTS AND NIGHTSHADE. HOWEVER, NO GLASS OR NIGHTSHADE WAS FOUND SO INERT MATERIAL, PIGWEED, ALFALF WERE REMOVED.	SCREEN	SEQ.1/17 ROUND-HOLE	GOOD	80	10			TWO HUNDRED GRAM SAMPLES SCREENED BY 1/17 RH, THEN BLOWN TO REMOVE ALMOST ALL INERT MATERIAL AND A FEW ALFALFA SEEDS IN THE HULL. TO REMOV
				INERTIS	STEMOIDES	INERT MATERIAL		PNEUMATIC	SEQ.	GOOD		100	100		
				AMARANTHUS		PIGWEED		DRAPER	SEQA.	GOOD		100	100		
				MEDICAGO	SATIVA	ALFALFA		DRAPER	SEQA.	GOOD		100	100		
				AMARANTHUS		PIGWEED		VELVET ROLL	SEQB.	GOOD		100	100		
				MEDICAGO	SATIVA	ALFALFA		VELVET ROLL	SEQB.	GOOD		100			
				AMARANTHUS		PIGWEED		GRAVITY	SEQC.	POOR					
				MEDICAGO	SATIVA	ALFALFA		GRAVITY	SEQC.	POOR					
324	APIUM	GRAVEOLENS	CELERY	N/A		N/A	SIZE SEED ACCORDING TO WIDTH, THICKNESS AND DENSITY IN PREPARATION FOR PLANTING TRIALS.	SCREENS	SEQ..038 OVER .033 OVER .027	GOOD					THE .038/.033/.027 SCREENS SCALPED OFF MOST CONTAMINANTS. THE FRACTIONS HELD BY THE .033 AND .027 WERE RUN THROUGH THE BLOWER. THE TWO HEAVY FRACTIONS FROM THE BLOWER WERE THEN DIVIDED IN HALF BY 6X25 AND 6X26 SLOTS.
				N/A		N/A		PNEUMATIC	SEQ.FRACTION OVER .033	GOOD					
				N/A		N/A		SCREEN	SEQ.6X25, HEAVY FRACT FROM PNEUMATIC	GOOD					
				N/A		N/A		PNEUMATIC	SEQ.FRACTION OVER .027	GOOD					
				N/A		N/A		SCREEN	SEQ.6X26, HEAVY FRACT FROM PNEUMATIC	GOOD					
700	APIUM	GRAVEOLENS	CELERY	PICRIS	ECHIODES	OXTONGUE	REMOVE OXTONGUE	DRAPER	24.5 DEG ANG, 35 RPM, 5 PASSES	GOOD		100	100	SPIRAL, INDENT CYLINDER, FRICTION, AND VELVET ROLL YIELDED UNSATISFACTORY RESULTS. FOR THE 1/21 ROUND-HOLE SCREEN TRIAL, THE SCREEN WAS MOUNTED ON AN ELECTRO-MAGNETIC VIBRATOR AND THE OXTONGUE SLID FLAT ALONG THE SCREEN.	BEST RESULTS WERE OBTAINED WITH THE 1/21 SCREEN AND INCLINED DRAPER.
				PICRIS	ECHIODES	OXTONGUE		PNEUMATIC		GOOD		88			
				PICRIS	ECHIODES	OXTONGUE		SCREEN	1/21 RD HOLE	GOOD		100	100		
1021	APIUM	GRAVEOLENS	CELERY												
505	ARACHIS	HYPOGAEA	PEANUT, RUNNER-TYPE	ARACHIS	HYPOGAEA	PEANUT	SEPARATE SPLITS FROM WHOLE, RUNNER-TYPE PEANUT KERNELS.	SCREEN	SEQ.20/64 ROUND-HOLE	GOOD				MORE SPLITS	A TOTAL OF ABOUT 21% OF THE ORIGINAL WEIGHT CAN BE OBTAINED AS SPLITS BY THE ABOVE SCREENING SEQUENCE.
								SCREEN	SEQ.14/64X3/4	GOOD		67			
761	ARACHIS	HYPOGAEA	PEANUT	ARACHIS	HYPOGAEA	PEANUT FINES	REMOVE PEANUT FINES FROM MIX OF SLICED PEANUTS AND FINES.	ELECTROSTATIC		POOR				FINES ARE PEANUT PARTICLES THAT PASS THROUGH US STANDARD SCREEN SIZE #20.	A CONTINUOUS TYPE PNEUMATIC SEPARATOR DID AN ADEQUATE JOB OF REMOVING FINES FROM SLICED PEANUTS.
				ARACHIS	HYPOGAEA	PEANUT FINES		PNEUMATIC	AIR FLOW=400FPM	GOOD		72	96		
824	ARACHIS	HYPOGAEA	PEANUT	INERT		INERT	TEST FRICTION SEPARATOR TO REMOVE CORN AND INERT MATERIAL.	FRICTION	SEQ. SEP. BAR NEARLY VERT.	GOOD	83	90	95	TWO SEPARATE BUT SIMILAR PEANUT SAMPLES WERE RUN YIELDING SIMILAR RESULTS.	TWO RUNS ON THE FRICTION SEPARATOR WERE NECESSARY. ONE, WITH VERTICAL BAR, TO REM
				ZEA	MAYS	CORN		FRICTION	SEQ. SEP. BAR AT 30 DEG.	GOOD	95	84	97		
691	ARACHIS	HYPOGAEA	PEANUT	MISC.		MISC.	REMOVE VINE/STEM, UNSHELLED PEANUTS, MUD BALLS, ROCKS, CORN, SEED PODS, GLASS, AND SPLITS FROM WHOLE KERNELS.	FRICTION	FOAM BAR(25 DEG FORWARD ANGLE), CARPET BELT	GOOD				THE PURPOSE OF THIS TEST WAS TO REVIEW SEVERAL TESTS CONDUCTED BY PERT LABS USING OUR FRICTION SEPARATOR.	OUR FINDINGS CONFORMED CLOSELY TO THOSE OF PERT LABS. FEED RATE IS CRITICAL WITH SINGLE FILE BEING OPTIMUM. 25 DEGREE FORWARD ANGLE OF BAR IS OPTIMUM.

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
368	ARACHIS	HYPOGAEA	GROUNDNUT(PEANUT)	RICINUS	COMMUNIS	CASTOR BEAN	REMOVE CASTOR BEANS.	SCREEN	.406" ROUND-HOLE	GOOD					THE .406" ROUND HOLE SCREEN
13	ARACHIS	HYPOGAEA	PEANUT	ROCKS	TRASH	ROCKSANDTRASH	REMOVE ROCKS AND TRASH	PNEUMATIC	E.S.M.	GOOD		100	100		THE PNEUMATIC SEPARATOR REMOVED ALL FOREIGN MATERIAL FROM THE PEANUTS.
506	ARACHIS	HYPOGAEA	PEANUT, VIRGINIA-TYPE	SPLITS		SPLITS	SEPARATE SPLITS FROM WHOLE PEANUTS.	SCREEN	SEQ.21/64" ROUND-HOLE	GOOD				PEANUTS PASSING THROUGH THE 21/64" SCREEN WERE PLACED ON 13/64" SCREEN TO REMOVE MORE SPLITS.	THE ABOVE SCREENING SEQUENCE REMOVED 55% OF THE ORIGINAL MATERIAL CONSISTING OF SPLITS AND ABOUT 3 1/2% WHOLE KERNELS.
								SCREEN	SEQ.14/64X3/4" SLOTTED	GOOD					
614	ARACHIS	HYPOGAEA	PEANUT	STEM MATERIAL		STEM MATERIAL	REMOVE ASSORTED UNDESIRABLES: SPLITS, STEM MATERIAL, SHELL MATERIAL AND FINE TRASH.	PNEUMATIC		GOOD		80			SUBMITTER WAS PLEASED WITH THE ABOVE SEPARATIONS.
				SPLITS		SPLITS		VIBRATORY	ALUMINUM OR FINE SANDPAPER	GOOD					
				SPLITS		SPLITS		FRICTION		GOOD					
				SHELL MATERIAL		SHELL MATERIAL		SCREEN	#6 ROUND HOLE	GOOD					
				TRASH/SHELL		TRASH/SHELL		PNEUMATIC		GOOD					
569	ARACHIS	HYPOGAEA	PEANUT	TRASH		TRASH	REMOVE TRASH.	PNEUMATIC	SEQ.						BASED ON THESE RESULTS, AN AIR-SCREEN MACHINE SHOULD BE THE BEST WAY TO MAKE THIS SEPARATION.
				TRASH		TRASH		SCREEN	SEQ.#29 ROUND-HOLE	GOOD		100	100		
				TRASH		TRASH		FRICTION		FAIR					
686	ARACHUS	HYPOGAEA	PEANUT				SEPARATE WHOLE KERNELS (FREE OF SHELLS), NUBBINS (SMALL UNSHELLED PEANUTS), AND RAISINS (IMMATURE PODS).	FRICTION		POOR				A PNEUMATIC/SCREENS SEQUENCE AND THE SPIRAL SEPARATOR DID SOME SEPARATING, BUT POORLY. THE BOUNCE PLATE, VELVET ROLL AND SPECIFIC GRAVITY SEPARATOR WERE INEFFECTIVE.	NO CONVENTIONAL METHOD TRIE
598	ARCTAGROSTIS			POA		NUGGET BLUEGRASS	REMOVE NUGGET BLUEGRASS	PNEUMATIC							SAMPLE FRACTIONS WERE SENT TO THE SUBMITTER FOR PURITY ANALYSIS.
				POA		NUGGET BLUEGRASS		VELVET ROLL							
				POA		NUGGET BLUEGRASS		VIBRATORY							
1043	ARCTIUM	LAPPA	GREAT BURDOCK	TRITICUM	AESTIVUM	WHEAT	REMOVE WILD OATS AND WHEAT	SCREEN	1/15X1/2	GOOD				100% REMOVAL OF CONTAMINANTS NECCESSARY FOR OVERSEAS EXPORT.	A 1/15X1/2 SCREEN FOLLOWED BY #8 INDENT CYLINDER REMOVED ALL CONTAMINANT WITH MINOR CROP LOSS.
				AVENA	FATUA	WILD OAT		SCREEN	SEQ.1/15X1/2	GOOD					
				AVENA	FATUA	WILD OAT		INDENT CYLINDER	#8 INDENT CYLINDER	GOOD					
601	ARCTOSTAPHYLOS		MANZANITA	PURSHIA	TRIDENTATA	BITTERBRUSH	REMOVE BITTERBRUSH	FRICTION	SEQ. POLYFOAM BAR, FIBER BELT	GOOD				ALSO TRIED WERE SCREENS, PNEUMATIC SEPARATOR, VELVET ROLLS, DRAPER, SPIRAL, AND VIBRATOR WITH POOR RESULTS.	THE BEST RESULTS WERE OBTAINED WITH THE FRICTION SEPARATOR FOLLOWED BY SCREENING.
								SCREEN	SEQ. 10 1/2	GOOD					
863	ARCTOTIS		AFRICAN DAISY	INERT		INERT	REMOVE FUZZ, CONDITION SEED.	SCARIFIER	SEQ.FILAMENT, 2 & 4 MIN TRIALS						ALL FRACTIONS RETURNED TO SUBMITTER FOR EVALUATION. GERMINATION TESTS REVEALED EXTENSIVE MECHANICAL DAMAGE TO SEED, REDUCING GERMINABILITY.
				INERT		INERT		PNEUMATIC	SEQ.						
625	ARTEMESIA	INERT		INERT		INERT	REMOVE INERT MATERIAL	AIR-SCREEN	SEQ. .02 AND .024 RD HOLE						GOOD RESULTS WERE OBTAINED BY AIR-SCREENING FOLLOWED BY PNEUMATIC SEPARATION.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
1007	ASPARAGUS	OFFICINALIS	ASPARAGUS	CONVOLVULUS	ARVENSIS	MORNINGGLORY	REMOVE MORNINGGLORY.	SPIRAL	LARGE SEED FLIGHT	GOOD		90			BEST RESULTS WERE OBTAINED USING THE SPIRAL OR DRAPER SEPARATORS. A 5-1/2 X 3/4 INCH SLOTTED SCREEN ALSO REMOVED ABOUT 75% OF THE MORNINGGLORY WITH ABOUT 50% LOSS OF CROP SEED
				CONVOLVULUS	ARVENSIS	MORNINGGLORY		DRAPER	30DG., .7FT./S	FAIR		95			
				CONVOLVULUS	ARVENSIS	MORNINGGLORY		VIBRATORY	SANDPAPER	POOR					
				CONVOLVULUS	ARVENSIS	MORNINGGLORY		GRAVITY	CLOTHDECK	POOR					
				CONVOLVOLUS	ARVENSIS	MORNINGGLORY		OTHER	SPIRAL-AIR	POOR					
166	ASPARAGUS	OFFICINALIS	ASPARAGUS	IPOMEA		MORNINGGLORY	REMOVE MORNINGGLORY.	ELECTROSTATIC	14KV, HOR=1, VERT=9, ROT=3-1/2	GOOD					THE ELECTROSTATIC SEPARATOR YIELDED 80% OF THE LOT WITH LITTLE OR NO MORNINGGLORY, A 2X10 SCREEN YIELDED 80% OF THE LOT WITH NO MORNINGGLORY AND THE VIBRATOR YIELDED 50% OF THE LOT WITH A FEW MORNINGGLORY.
				IPOMEA		MORNINGGLORY		SCREEN	2X10	GOOD		100	100		
				IPOMEA		MORNINGGLORY		VIBRATORY	FINE 3/4" SANDPAPER DECK	FAIR					
				IPOMEA		MORNINGGLORY		DRAPER		POOR					
				IPOMEA		MORNINGGLORY		PNEUMATIC		POOR					
				IPOMEA		MORNINGGLORY		VELVET ROLL		POOR					
				IPOMEA		MORNINGGLORY		SPIRAL		POOR					
510	ASPARAGUS	OFFICINALIS	ASPARAGUS	IPOMEA		MORNINGGLORY	REMOVE MORNINGGLORY	SCREEN	SEQ.7/64X3/4 SLOTTED-HOLE	GOOD					BEST RESULTS WERE OBTAINED WITH SCREENS AND VIBRATOR SEPARATOR. TWO PASSES WERE MADE ON THE VIBRATOR AND THE REJECT FRACTION WAS RERUN.
				IPOMEA		MORNINGGLORY		VIBRATORY	SEQ.FINE SANDPAPER	GOOD		100	100		

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762	ASPARAGUS	OFFICINALIS	ASPARAGUS	IPOMEA		MORNING GLORY	REMOVE MORNING GLORY	VIBRATORY	DECK=SANDBLASTED AL., SIDESLOPE=4, BACKSLOPE=6, FEED=6, VIBRATOR=22	GOOD	98	93	100		THE VIBRATOR YIELDED HIGHEST SELECTIVITY WHILE THE SCREEN AND SPIRAL YIELDED HIGHER CLEANING RATE. THE COLOR SORTER LOST THE LEAST CROP.
				IPOMEA		MORNING GLORY		SCREEN	7/64X3/4 SLOTTED SCREEN	GOOD	98	86	100		
				IPOMEA		MORNING GLORY		ELECTROSTATIC		GOOD	98	81	100		
				IPOMEA		MORNING GLORY		SPIRAL		POOR	98	92	99		
				IPOMEA		MORNING GLORY		COLOR SORTER		FAIR	98	63	99		
1015	ASPARAGUS	OFFICINALIS	ASPARAGUS	UNKNOWN			DETERMINE SCREEN HOLE SIZES FOR CLEANING	SCREEN	#9 TOP #7 BOTTOM						THESE SCREENS WERE DETERMINED BY TESTS OF AN UNKNOWN VARIETY OF ASPARAGUS. LOSSES FOR EACH PAIR OF SCREENS WAS LESS THAN 5%. ACTUAL RESULTS WILL VARY.
				UNKNOWN				SCREEN	2X10 TOP 2X12 BOTTOM						
				UNKNOWN				SCREEN	6/64X3/4 TOP 4-7/8/64 BOTTOM						
1059	ASTER	LAEVIS	SMOOTH ASTER												
1058	ASTER	NOVAE-ANGLIAE	NEW ENGLAND ASTER												
1060	ASTER	PTARMACOIDES	STIFF WHITE ASTER												
1061	ASTER	PUNICEUS	SWAMP ASTER												
135	ASTER		ASTER	AMARANTHUS		PIGWEED	REMOVE PIGWEED	VIBRATORY	VERY FINE SANDPAPER DECK						ON THE VIBRATOR PIGWEED ROLLED DOWNHILL.
138	ASTER		ASTER				CLEAN SEED.								PROCESSED WITH SUBMITTER PRESENT. NO RECORD.
764	ATRIPLEX	CORTO	SALTBRUSH	INERT		INERT	REMOVE INERT MATERIAL: STICKS	SCREEN	SEQ. #6 ROUND HOLE					THE MIXTURE HAD TO BE DRIED BEFORE THE CLEANING WAS DONE.	THE FRICTION SEPARATOR, ELECTROSTATIC SEPARATOR AND INDENT DISK DID NOT PERFORM WELL ON THE MOIST SAMPLE. THE SAMPLE WAS DRIED AND SCREENS WERE USED WHICH WORKED QUITE WELL.
				INERT		INERT		SCREEN	SEQ. 3X14 SLOTTED HOLE	GOOD					
1180	AVENA	SATIVA	OATS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	PNEUMATIC	SDB	GOOD		100		LOW AIR VELOCITY IN INITIAL CLEANING LEFT QUACKGRASS IN THE LOT. LOT CAN BE RECLEANED USING HIGHER AIR VELOCITY TO REMOVE MOST OF THE QUACKGRASS.	
126	AVENA	SATIVA	OATS	AVENA	FATUA	WILD OATS	REMOVE WILD OATS	VELVET ROLL	100 RPM, 8 DEG INCLINE	GOOD	80	92	96		BEST RESULTS WITH THE VELVET ROLLS WHICH INCREASED PURITY FROM 80% TO 96%, DECREASED WILD OAT CONTENT FROM 13% TO 1% AND SALVAGED 70% OF THE LOT.
				AVENA	FATUA	WILD OATS		PNEUMATIC		POOR					
				AVENA	FATUA	WILD OATS		SCREENS	VARIOUS SCREENS	POOR					
				AVENA	FATUA	WILD OATS		SPIRAL		POOR					
				AVENA	FATUA	WILD OATS		ELECTROSTATIC		POOR					
				AVENA	FATUA	WILD OATS		VIBRATORY		POOR					
				AVENA	FATUA	WILD OATS		DRAPER		POOR					
142	AVENA	SATIVA	OATS	AVENA	FATUA	WILD OATS	REMOVE WILD OATS. SAMPLE MADE UP FROM PURE LOTS SUBMITTED: 90% OATS, 10% WILD OATS.	AIR-SCREEN	6/64X3/4	GOOD	90	100	100		THE AIR-SCREEN MACHINE YIELDED GOOD RESULTS. A 6/64X3/4 SCREEN REMOVED ALL WILD OATS WITH 47% CROP LOSS AND A 5-1/2X3/4 SCREEN W/DAMS REMOVED 98% OF THE WILD OATS WITH 7% CROP LOSS.
				AVENA	FATUA	WILD OATS		AIR-SCREEN	5-1/2X3/4 W/2 TRIANGULAR DAMS	GOOD	90	98	100		
				AVENA	FATUA	WILD OATS		VIBRATORY		POOR					
				AVENA	FATUA	WILD OATS		VELVET ROLL		POOR					
				AVENA	FATUA	WILD OATS		ELECTROSTATIC		POOR					
1233	AVENA	SATIVA	OAT	AVENA	SATIVA	OATS	SEPARATE SWEET PEA CROP FROM OAT CROP	INDENT CYLINDER	GROOVED POCKET TRIEUR					SWEET PEAS GROWN ON A TALL OAT VARIETY AND HARVESTED TOGETHER.	
1234	AVENA	SATIVA	OAT	AVENA	FATUA	WILD OAT	REMOVE WILD OAT	INDENT CYLINDER	GROOVED POCKET TRIUR	FAIR	100/LB	90	9/LB		
38	AVENA		GRAY OATS	BROMUS		CHESS	REMOVE BARLEY, CHESS, DARNEL, WILD BUTTERCUP AND HAIRY VETCH.	SCREENS	SEQ.#8 OVER 1/13, "BOUNCED"	GOOD					ABOVE SEQUENCE YIELDS BEST RESULTS. RERUNNING CLEAN FRACTION HELPS SOME.
				LOLIUM		DARNEL		DRAPER	SEQ.WITH PLASTIC	GOOD					
165	BEGONIA		BEGONIA	BEGONIA		BEGONIA	REMOVE UNDEVELOPED SEEDS (SMALL, MISSHAPEN AND SHRIVELLED).	SCREENS	40X40/45X45/50X50/60X60 STACKED	GOOD					THE STACK OF HANDSCREENS MADE A GOOD SEPARATION WITH 85-90% OF THE LOT HELD ON THE 60X60 SCREEN WITH VERY FEW UNDEVELOPED SEEDS. THE BLOWER DROPPED ABOUT 95% OF THE LOT, BUT THE SEPARATION WAS LESS DISTINCT THAN WITH THE SCREENS.
				BEGONIA		BEGONIA		PNEUMATIC		FAIR					
1169	BETA	VULGARIS	SUGARBEET	BETA	VULGARIS	SUGARBEET	IMPROVE GERMINATION OF BEET SEED USING GRAVITY TABLE	GRAVITY	KAMAS WESTRUP - CLOTH DECK						
348	BETA	VULGARIS	DETROIT DARK RED BEET	INERT		INERT	REMOVE MALLOW, MORNINGGLORY, AND INERT MATERIAL.	SCREEN	SEQ.#16 ROUND HOLE SCREEN	GOOD					BEST RESULTS OBTAINED WITH #16 SCREEN TO REMOVE TRASH, A 6/64X3/4 SCREEN TO DROP MALLOW AND MORNINGGLORY AND A SIZE MM INDENT DISC TO REJECT MORE STICKS. A #20 INDENT CYLINDER SHOULD MAKE ABOUT THE SAME SEPARATION AS THE DISC.
				IPOMEA		MORNINGGLORY		SCREEN	SEQ.6/64X3/4 SLOT	GOOD					
				MALVA		MALLOW		SCREEN	SEQ.6/64X3/4 SLOT	GOOD					

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				STICKS		STICKS		INDENT DISC	SEQ.MM DISC,FRACT OVER 6/64X3/4	GOOD					
555	BETA	VULGARIS	BEET	IPOMEA		MORNINGGLORY	REMOVE MORNINGGLORY	SCREEN	SEQ. 8 1/2 ROUND-HOLE	GOOD					SCREENING ON 8 1/2 ROUND-HOLE SCREEN FOLLOWED BY BLOWING YIELDED OVER 99% OF THE ORIGINAL LOT FREE OF MORNINGGLORY SEED.
				IPOMEA		MORNINGGLORY		PNEUMATIC	SEQ.	GOOD		100	100		
				IPOMEA		MORNINGGLORY		ELECTROSTATIC		POOR					
				IPOMEA		MORNINGGLORY		VIBRATORY		POOR					
766	BETA	VULGARIS	BEET	RAPHANUS	SATIVUS	RADISH	REMOVE RADISH (IN THE POD)	FRICTION	CARPET BELT, SCOTCHBRITE BAR 3 DEGREES FROM VERT.	GOOD		68		A SINGLE PASS WAS PERFORMED THEN THE REJECT FRACTION WAS RUN THROUGH TWICE.	A REASONABLY GOOD SEPARATION CAN BE MADE WITH A SELECTIVITY OF ABOUT .6.
989	BETA	VULGARIS	SUGAR BEET	TRITICUM		WHEAT	REMOVE WHEAT.	SCREEN	SEQ.						SUGAR BEET WAS LIFTED FROM THE WHEAT BY BLOWING. A 100% FINAL PURITY WAS ACHIEVED BY SCREENING OUT SHRIVELED WHEAT FIRST, WHICH WOULD OTHERWISE HAVE BEEN LIFTED WITH THE BEET.
				TRITICUM		WHEAT		PNEUMATIC	SEQ.1100FPM	GOOD		100	100		
111	BETA	VULGARIS	BEET				PERFORM CONVEYING TRIALS AND CHECK FOR SEED DAMAGE.							TESTS CARRIED OUT WITH 1-1/2" PIPELING (30' VERT, 26'HOR, 4 ELBOWS) USING COMMERCIAL BLOW-THROUGH A	THE BEET SEEDS WERE TRANSPORTED READILY IN THE LEAN OR DENSE PHASES AT LOW VELOCITY.
553	BETA	VULGARIS	SUGAR BEET				POLISH SEED ON BELT THRESHER FOR PRECISION PLANTING AND BETTER FLOWING CHARACTERISTICS. POLISHING INVOLVES KNOCKING OFF ROUGH EDGES ON THE SEED.	BELT THRESHER		GOOD					TRIALS ON THE THRESHER LOOKED EXCELLENT.
678	BETA	VULGARIS	BEET				DETERMINE SURFACE AREA OF SEEDS								FOLLOWING A LIMITED LITERATURE SEARCH, A SUMMARY SHEET CONTAINING VARIOUS APPROACHES IN DETERMINING SURFACE AREA FOR OBJECTS OF DIFFERENT SIZES WAS GIVEN TO THE SUBMITTERS.
807	BETA	VULGARIS SACCHARIFERA	SUGAR BEET	BETA	VULGARIS	BEET	SEPARATE MULTI-GERM SEED FROM MONO-GERM SEED	INDENT CYLINDER		POOR					BECAUSE OF SIMILARITIES IN SIZE AND SHAPE, NO SEPARATION METHOD WAS EFFECTIVE. IN THE FUTURE THE VISION SYSTEM MAY BE THE BEST TECHNIQUE.
1011	BETA	VULGARIS SACCHARIFERA	SUGAR BEET	BETA	VULGARIS	LOW GERM SUGARBEET	IMPROVE GERMINATION OF THREE LOTS OF SUGAR BEET USING GRAVITY TABLE	VIBRATORY		POOR					
854	BETA	VULGARIS SACCHARIFERA	SUGAR BEET	INERT		INERT	DETERMINE PERCENTAGE OF INERT.	SCREEN	SEQ. #16 ROUND HOLE						AFTER SCREENING AND PNEUMATIC SEPARATION, THE AMOUNT OF INERT WAS FOUND TO BE ABOUT 25% BY WEIGHT.
				INERT		INERT		PNEUMATIC	SEQ. 6X6						
841	BETA	VULGARIS SACCHARIFERA	SUGAR BEET	TRITICUM	AESTIVUM	WHEAT	REMOVE WHEAT AND BEDSTRAW.	GRAVITY	SEQ.	GOOD					A ROUND HOLE SCREEN IN AREA OF 8/64 TO 10/64 WILL EFFECTIVELY REMOVE MOST OF THE BEDSTRAW AND SOME OF THE WHEAT. A GRAVITY TABLE WILL REMOVE WHEAT AND BEDSTRAW FROM THE SUGAR BEET SEED.
				GALIUM		BEDSTRAW		SCREEN	SEQ.RD HOLE: 8/64 TO 10/64	GOOD					
790	BETA	VULGARIS SACCHARIFERA	SUGAR BEET	VICIA	SATIVA	COMMON VETCH	REMOVE COMMON VETCH							THE SUBMITTER WANTED TO KNOW WHICH MACHINED WOULD SEPARATE VETCH FROM THE BEET SEED IN THIS DISCARD PORTION OF A PREVIOUSLY CLEANED LOT. NO NUMBERS WERE NEEDED.	THE FRICTION, PNEUMATIC, SPIRAL, DRAPER AND BOUNCE PLATE SEPARATORS IMPROVED PURITY IN VARYING DEGREES. THE FRICTION SEPARATOR WAS THE MOST EFFECTIVE. THE LARGE FLIGHT OF THE SPIRALALSO GAVE GOOD RESULTS.
639	BETA	VULGARIS SACCHARIFERA	SUGAR BEET				POLISH BEET SEED	BELT THRESHER						POLISHING IS ADD	THRESHED LOTS WERE RETURNED TO SUBMITTER FOR EVALUATION.
1195	BOTHRIOCHLOA	INSCULPTA	BLUESTEM	BOTHRIOCHLOA	INSCULPTA	UNTHRESHED BLUESTEM	THRESH	SCARIFIER	LAH	GOOD				THESE SAMPLES WERE RE	THE BRUSH DEBEARDER GAVE BEST RESULTS FOR THRESHING BOTRIOCHLOA SEED.
				BOTHRIOCHLOA	INSCULPTA	UNTHRESHED BLUESTEM		SCARIFIER	FILAMENT THRESHER	FAIR					
35	BOUTELOUA	CURTIPENDULA	SIDE-OATS GRAMA	AWNS		AWNS	REMOVE BLANK SEED, CHAFF AND STEMS.	DEBEARDER	SEQ. 75RPM, 45 MIN	POOR					THE SEED IS VERY SENSITIVE TO GROATING AND ANY ACTION SEVERE ENOUGH TO DEAWN IT WOULD DAMAGE IT. THE PNEUMATIC SEPARATOR IS VERY GOOD AT REDUCING THE BLANK SEED FROM THE GRAMA.
								PNEUMATIC	SEQ.	GOOD					
				BLANK SEED		BLANK SEED		ELECTROSTATIC	SEQ.	POOR					
30	BOUTELOUA	ERIOPODA	BLACK GRAMA	AWNS		AWNS	DEAWN BLACK GRAMA WITH LABORATORY DEAWNER (JAMES) AND CLEAN.	DEBEARDER	SEQ. VARIOUS SPEEDS/TIMES	POOR					THE LABO
				CHAFF		CHAFF		SCREEN	SEQ. 4X26	GOOD					
				CHAFF		CHAFF		PNEUMATIC	SEQ.	GOOD		20			
				AWNS		AWNS		OTHER	SEQ. BLOW TORCH FLAME	GOOD					
				INERT		INERT		SCREEN	SEQ.6X50	GOOD					
1108	BOUTELOUA	GRACILIS	BLUE GRAMMA (3VAR)	BOUTELOUA	GRACILIS	BLUE GRAMMA IN THE HULL	FREE CARYOPSIS OF LEMMA AND PALEA	SCARIFIER	SEQ LAH W/#14SQ OR #20R	FAIR				THREE VARITIES OF THIS MATERIAL WERE SENT. OBJECT OF THE WORK WAS TO REMOV	USE LAH SCARIFIER AIR SCREEN, GRAVITY AND AIR COLUMN IN SEQUENCE TO REMOVE THE CARYOPSIS AND CLEAN BLUE GRAMMA GRASS. RERUNNING THE SCREENINGS AND SCALPINGS WILL INCREASE THE AMOUNT OF SEED SALVAGED.
				BOUTELOUA	GRACILIS	BLUE GRAMMA IN THE HULL		AIR-SCREEN	SEQ .043X3/4 SH TOP 0.027 RH BOTTOM	FAIR					

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				BOUTELOUA	GRACILIS	BLUE GRAMMA IN THE HULL		GRAVITY	SEQ USED TO CONCENTRATE GROATS	FAIR					
				BOUTELOUA	GRACILIS	BLUE GRAMMA IN THE HULL		PNEUMATIC	SEQ USED ON SOME FRACTIONS TO CONCENTRATE GROATS	FAIR					
1156	BOUTELOUA		BLUE GRAMMA GRASS	DIGITARIA	SANGUINALIS	LARGE CRABGRASS	REMOVE LARGE CRABGRASS				73			THIS LOT HAD BEEN SCREENED THREE TIMES, RUN ON GRAVITY AND INDENTED BUT STILL CONTAINED 26% CRABGRASS SEED.	
694	BRASSICA	CAMPESTRIS	BIRD RAPE	GALIUM	APARINE	BEDSTRAW	REMOVE BEDSTRAW	FRICTION	8 DEG BAR FORWARD ANGLE	GOOD		82		MAGNETIC SEPARATOR WAS INEFFECTIVE.	THE FRICTION SEPARATOR GAVE THE BEST RESULTS, HOWEVER, THE VELVET ROLL ALSO SHOWS PROMISE.
				GALIUM	APARINE	BEDSTRAW		FRICTION	12 DEG BAR FORWARD ANGLE	GOOD		100	100		
				GALIUM	APARINE	BEDSTRAW		VELVET ROLL		FAIR		80			
282	BRASSICA	HIRTA	YELLOW MUSTARD	SAPONARIA	VACCARIA	COWCOCKLE	REMOVE COWCOCKLE.	PNEUMATIC		FAIR		100	100	BECAUSE OF SEED DIMENSION OVERLAP, A LENGTH SEPARATION IS NOT FEASIBLE.	THE PNEUMATIC SEPARATOR DID FAIRLY WELL, BUT ONLY RECOVERED 35% OF THE MUSTARD FREE OF COCKLE. THE COLOR SORTER APPARENTLY MADE A SEPARATION, BUT NO EVALUATION WAS STATED IN ORIGINAL REPORT OTHER THAN IT CAN ONLY HANDLE 35 TO 45 LBS/HR.
				SAPONARIA	VACCARIA	COWCOCKLE		ELECTROSTATIC		POOR		100	100		
				SAPONARIA	VACCARIA	COWCOCKLE		ELECTROSTATIC		POOR		88			
				SAPONARIA	VACCARIA	COWCOCKLE		COLOR SORTER							
1067	BRASSICA	JUNCEA	BROADLEAF MUSTARD	GERANIUM	DISSECTUM	CUTLEAF GERANIUM	REMOVE CUTLEAF GERANIUM	VELVET ROLL		POOR					NEITHER OF THE MACHINES TRIED WAS SUCCESSFUL IN THIS SEPARATION.
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM		FRICTION	FRICTION ROLL	POOR					
1114	BRASSICA	JUNCEA	MUSTARD	INERT		SOIL	REMOVE SOIL FROM MUSTARD	GRAVITY						THIS WAS A SMALL LOT OF MUSTARD SEED FOR SHIPMENT TO JAPAN REQUIRING 0.03% SOIL OR LESS.	
1253	BRASSICA	NAPUS	RAPE	LIMNANTHES	ALBA	MEADOWFOAM	REMOVE MEADOWFOAM FROM RAPE SEED							THIS WAS A REQUEST FOR INFORMATION ON METHODS TO REMOVE MEADOWFOAM FROM RAPE SEED. TEXTURE SEPARATORS WERE RECOMMENDED. NO SAMPLE WAS RECEIVED.	
1073	BRASSICA	NAPUS	RAPE	MISC		MISC	REMOVE OATS, BARLEY, WEED SEED, STRAW AND INERT MATERIAL FROM PEAS AND RAPE SEED.	SCREENS	SEQ.8/64X3/4 SLOT OVER #10						THIS PROBLEM SAMPLE IS THE OTHER HALF OF #0716, WHICH NOW DEALS WITH THE PEAS ONLY. THE ABOVE SEQUENCE YIELDS A 99% PURE RAPE SEED LOT.
				MISC		MISC		SCREENS	SEQ.#5 1/2 RD OVER 1/22X1/2				98		
				MISC		MISC		PNEUMATIC	SEQ.770FPM				99		
684	BRASSICA	NAPUS	TORCH RAPESEED	MISCELLANEOUS			REMOVE INERT MATERIAL, OTHER SEEDS AND SCLEROTINIA.	VIBRATORY		GOOD					THE VIBRATOR, PNEUMATIC SEPARATOR AND AIR-SCREEN YIELDED VERY GOOD RESULTS, BUT THE AIR-SCREEN IS PROBABLY THE BEST FOR THE SUBMITTER BECAUSE OF ITS HIGHER CAPACITY.
				MISCELLANEOUS				PNEUMATIC		GOOD					
				MISCELLANEOUS				AIR-SCREEN	1/12 RD TOP, 1/17 RD BOTTOM	GOOD			100		
449	BRASSICA	NAPUS NAPO-BRASSICA	RUTABAGA				SEPARATE LOT INTO SIZED FRACTIONS.								A 1/13 RH SCREEN HOLDS ABOUT 3%, A 1/15 HOLDS ABOUT 71% AND A 1/18 HOLDS ABOUT 24%, DROPPING 2%.
1101	BRASSICA	OLERACEA	CABBAGE	BRASSICA	OLERACEA	LOW GERM	REMOVE LOW GERM SEED							THIS SAMPLE HEATED IN THE PILE DUE TO HIGH MOISTURE CONTENT. CURRENT GERM IS APPROX. 50%.	POSSIBLE SORTING ON COLOR SORTER WITH UV HEAD. THE DIFFERENCE IS VISIBLE UNDER THE MINERAL LIGHT (UV) AFTER SOAKING AND DRYING.
968	BRASSICA	OLERACEA	WHITE ALYSSUM		RAPHANISTRUM	WILD RADISH	REMOVE WILD RADISH. INITIAL PURITY 5-6% RADISH.	INDENT CYLINDER							THE COLOR SORTER APPEARS TO BE THE ONLY MACHINE CAPABLE OFýSEPARATING RADISH FROM KALE BUT IS RELATIVELY SLOW AND EXPENSIVE.
								COLOR SORTER							
								SPIRAL							
497	BRASSICA	OLERACEA ACEPHALA	KALE	GERANIUM		CRANESBILL	REMOVE CRANESBILL.	MAGNETIC		GOOD					MANY MACHINES WERE TRIED, BUT ONLY THE MAGNETIC SEPARATOR WAS SUCCESSFUL, SALVAGING 94% OF THE MATERIAL AS GOOD SEED WITH A SMALL AMOUNT OF CRANESBILL. A SECOND RUN ON THE MAGNETIC SEPARATOR WOULD PROBABLY YIELD AN EVEN CLEANER CROP SAMPLE.
635	BRASSICA	OLERACEA ACEPHALA	COLLARD	GERANIUM		CRANESBILL	REMOVE CRANESBILL	FRICTION				90		AIR AND VIBRATOR SEPARATORS WERE INEFFECTIVE.	A 1/15 ROUND-HOLE SCREEN YIELDED THE BEST RESULT WITH 6.5% LOSS AND 100% FINAL PURITY.
				GERANIUM		CRANESBILL		VELVET ROLL				60			
				GERANIUM		CRANESBILL		SCREEN	1/15 ROUND-HOLE			100	100		
798	BRASSICA	OLERACEA ACEPHALA	COLLARDS	GERANIUM	DISSECTUM	CUTLEAF CRANESBILL	REMOVE CUTLEAF CRANESBILL BY MAGNETIC SEPARATION.	MAGNETIC	50G SEED, 1G FE,.5G WATER	POOR					SCREENING APPEARS TO BE THE BEST METHOD OF REMOVING CUTLEAF CRANESBILL FROM CAROLINA COLLARDS. A 1/14 ROUND HOLE SCREEN RESULTS IN 10% CROP LOSS WITH ESSENTIALLY COMPLETE REMOVAL OF CRANESBILL.
				GERANIUM	DISSECTUM	CUTLEAF CRANESBILL		MAGNETIC	1% SOLN WETTING AGENT, VERY FINE POWDER	POOR					
				GERANIUM	DISSECTUM	CUTLEAF CRANESBILL		MAGNETIC	FERROMAGNETIC LIQUID	POOR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
605	BRASSICA	OLERACEA BOTRYTIS	BROCCOLI	DIRT		DIRT	REMOVE DIRT CLODS FROM BROCCOLI BREEDER SEED SAMPLE.	VIBRATORY	180 GRIT DECK	GOOD				SCREENS, FRICTION, VELVET ROLLS, AND INDENT CYLINDER WERE INEFFECTIVE. PRACTICALLY NO CROP LOSS WAS TOLERABLE.	GOOD RESULTS WERE OBTAINED WITH THE VIBRATOR SEPARATOR. ALSO, HAND-RUBBING AGAINST A SPONGE RUBBER SURFACE TO CRUSH THE CLODS YIELDED GOOD RESULTS.
				DIRT		DIRT		OTHER	HAND-RUB ON SPONGE RUBBER	GOOD					
370	BRASSICA	OLERACEA CAPITATA	CABBAGE	BRASSICA	OLERACEA CAPITATA	SHRIVELED CABBAGE	REMOVE INERT MATERIAL AND SHRIVELED AND LIGHT CABBAGE SEED.	SCREEN	SEQ.1/22X1/2 SLOTTED-HOLE	GOOD					THE 1/22X1/2 SLOT DROPPED 1.5% OF THE SAMPLE WHICH WAS SHRIVELED AND SMALL SEED WITH SOME INERT MATERIAL. THE PNEUMATIC SEPARATOR REMOVED 1.4% AS INERT MATERIAL AND LIGHT SEED.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
709	BRASSICA	OLERACEA CAPITATA	CABBAGE	BRASSICA	RAPA	WILD MUSTARD	REMOVE WILD MUSTARD AND MORNINGGLORY	PNEUMATIC		POOR		73		MAGNETIC, FRICTION, VIBRATOR, GRAVITY AND SPIRAL SHOWED LIMITED OR NO TENDENCY TO MAKE THIS SEPARATION.	SCREENS, INCLINED DRAPER AND, MAYBE, THE INDENT CYLINDER HAVE THE CAPABILITY OF REDUCING THE MUSTARD CONTAMINATION TO BELOW THE REQUIRED 300 PER POUND.
				IPOMEA		MORNINGGLORY		DRAPER	12 DEG INCLINE, 40 FPM	GOOD		92			
969	BRASSICA	OLERACEA CAPITATA	CABBAGE	BRASSICA	OLERACEA CAPITATA	CABBAGE	REMOVE SHRIVELED SEED FROM CABBAGE.	INDENT CYLINDER	#4 CYLINDER	GOOD	75		99	THE VIBRATOR FOLLOWED BY THE BLOWER YIELDED A 99% PURE FRACTION WITH LESS THAN 10% LOSS OF GOOD SEED.	
								PNEUMATIC	1/18X3/4 OVER 1/16 RD HOLE	GOOD		98			
				BRASSICA	OLERACEA CAPITATA	CABBAGE		SCREENS							
670	BRASSICA	OLERACEA CAPITATA	CABBAGE	GALIUM		BEDSTRAW	REMOVE BEDSTRAW	FRICTION	WEATHERSTRIP BAR, VINYL BELT	GOOD				ELECTROSTATIC, PNEUMATIC, SCREEN AND VIBRATOR SEPARATOR WERE INEFFECTIVE.	THE FRICTION SEPARATOR YIELDED GOOD RESULTS WITH 97.5% OF THE CABBAGE SAVED. FOUR PASSES WERE MADE, THEN THE RESULTING ROUGH FRACTION WAS RUN FOUR MORE TIMES.
								VELVET ROLL		FAIR		77			
1112	BRASSICA	OLERACEA CAPITATA	CABBAGE	GALIUM		BEDSTRAW	REMOVE SOIL	GRAVITY	KAMAS SMALL DECK	GOOD	0.2		0	THIS WAS A SMALL LOT OF 40 LBS WORTH $20/LB FOR SHIPMENT TO JAPAN. INITIAL LEVEL WAS 0.19% SOIL. REQUIRED LEVEL WAS 0.03% SOIL. GRAVITY APPEARED TO REMOVE	USE GRAVITY TABLE AND 1/13 ROUND HOLE SCREEN TO SIGNIFICANTLY REDUCE SOIL CONTENT FROM CABBAGE.
								SCREEN	1/13 ROUND HOLE	GOOD					
372	BRASSICA	OLERACEA CAPITATA	CABBAGE	INERT	INCARNATUM	S0IL	REMOVE CRIMSON CLOVER.	VIBRATORY		GOOD				THE INDENT WAS TRIED WITH UNSATISFACTORY RESULTS. IF MORE CLOVER CAN BE TOLERATED, THE VELVET ROLLS PRODUCED A YIELD OF 96% WITH 78 CLOVER IN 50 GRAMS.	THE ABOVE SPIRAL, VIBRATOR AND SPIRAL/SCREEN OPERATIONS DID THE BEST, YIELDING 82 TO 89% WITH ABOUT 30 CLOVER SEEDS IN 50 GRAMS.
				TRIFOLIUM	INCARNATUM	CRIMSON CLOVER		SPIRAL		GOOD					
				TRIFOLIUM	INCARNATUM	CRIMSON CLOVER		SCREEN	SEQ.4X16	GOOD					
				TRIFOLIUM	INCARNATUM	CRIMSON CLOVER		SPIRAL	SEQ.	GOOD					
496	BRASSICA	OLERACEA CAPITATA	CABBAGE	VICIA	HIRSUTA	TINY VETCH	REMOVE TINY VETCH SEED BY GRAVITY TABLE.	GRAVITY		POOR					MANY MACHINES WERE TRIED, BUT ONLY THE COLOR SORTER YIELDED GOOD RESULTS. 91% OF THE MATERIAL WAS RECOVERED AS ALMOST PURE CABBAGE SEED.
				VICIA	HIRSUTA	TINY VETCH		COLOR SORTER	2 PASSES	GOOD					
1201	BRASSICA	OLERACEA GEMIFERA	CHINESE KALE	RAPHANUS	SATIVUS	RADISH	REMOVE RADISH	INDENT CYLINDER	SEQ 2.75 MM POCKET	FAIR		90		THIS MATERIAL CONTAINED BOTH WILD AND DOMESTIC RADISH AT APPROX 9/LB AFTE	
				RAPHANUS	SATIVUS	RADISH		COLOR SORTER	SEQ #70 OR #92 WITH LIGHT SORT						
755	BRASSICA	OLERACEA GONGYLODES	KOHLRABI	GERANIUM	DISSECTUM	CUTLEAF CRANESBILL	REMOVE CUTLEAF CRANESBILL AND BIRD RAPE	SCREEN	SEQ.1/16 ROUND HOLE						MOST OF THE CRANESBILL PASSED THROUGH THE SCREENS, BUT A POSITIVE IDENTIFICATION COULD NOT BE MADE BETWEEN THE KOHLRABI AND BIRD RAPE SEED IN THE REMAINING SAMPLE.
				BRASSICA	RAPA	BIRD RAPE		SCREEN	SEQ.1/18X3/4 OBLONG HOLE						
								INDENT CYLINDER	SEQ. #6 INDENT CYLINDER						
1104	BRASSICA	OLERACEA GONGYLODES	KOHLRABI	GERANIUM	DISSECTUM	CUTLEAF GERANIUM	REMOVE CUTLEAF GERANIUM	VELVET ROLL	SEQ. MEDIUM SPEED SLOPE 12	FAIR	98	56	99	INITIAL LEVEL OF G.DISSECTUM WAS 1.8%. 0.50% OR LESS WAS NEEDED TO MAKE	USE 1/15 ROUND HOLE SCREEN FOLLOWED BY VELVET ROLL TO REMOVE A PORTION OF THE CUTLEAF GERANIUM
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM		SCREEN	SEQ. 1/16 RH HAND SCREEN	FAIR	99	49	99		
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM		PNEUMATIC	UNTIL 10% LIFTED	POOR					
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM		VIBRATORY	SANDPAPER DECK	POOR					
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM		SCREEN	1/15 RH	FAIR	98	45	99		
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM		COLOR SORTER	SPECTRAL MEASUREMENTS ONLY	POOR					
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM		SCREEN	1/14 RH	FAIR					
738	BRASSICA	OLERACEA GONGYLODES	KOHLRABI	VICIA		VETCH	REMOVE VETCH FROM KOHLRABI SEED	GRAVITY	AIR=3, BACKSLOPE=1, SIDESLOPE=6.5, SPEED=575, DECK=PERF. CU.	FAIR				ONE PASS ON GRAVITY TABLE DID NOT BRING PURITY TO ACCEPTABLE RANGE. A SECOND PASS MIGHT ALTHOUGH THIS WAS NOT TRIED.	VETCH MAY BE PARTIALLY REMOVED FROM KOHLRABI ON THE GRAVITY TABLE WITH TWO OR MORE PASSES IMPROVING THE CLEANING JOB.
1117	BRASSICA	PEKINENSIS	CHINESE CABBAGE	BRASSICA	RAPA	WILD MUSTARD	REMOVE WILD MUSTARD							CROP IS NETTED AND ROUGHER THAN THE CONTAMINANT. BEST GUESS WAS WILD MUSTARD FOR THE CONTAMINANT, BUT IT MAY BE SOME OTHER SPECIES.	

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1200	BRASSICA	PEKINENSIS	CHINESE CABBAGE	RAPHANUS	SATIVUS	DICON RADISH	REMOVE DICON RADISH AND SOIL	SPIRAL	LARGE SEED FLIGHT	GOOD				FOR SHIPMENT TO JAPAN FOR PRODUCE.	
				INERT		SOIL		SPIRAL	LARGE SEED FLIGHT	GOOD					
730	BRASSICA	RAPA	BIRD RAPE	BRASSICA	RAPA	DEAD BIRD RAPE	REMOVE DEAD OR LOW-GERMINATION SEED	FRICTION	VINYL-SUEDE BELT AND VINYL BAR					LOT HAD BEEN DAMAGED BY HEAT SO SEPARATION OF DEAD SEED WAS DESIRED.	DIFFERENT SEPARATORS WERE USED ARBITRARILY AND SUBMITTER TOOK SAMPLES FOR GERMINATION TESTS.
				BRASSICA	RAPA	DEAD BIRD RAPE		SPIRAL							
				BRASSICA	RAPA	DEAD BIRD RAPE		PNEUMATIC	6"X6" ESM WITH ROUND-SECTION LINER						
113	BRASSICA	RAPA	TURNIP	GERANIUM		CRANESBILL	REMOVE CRANESBILL.	ELECTROSTATIC	16.5KV, HOR=6-3/4,VERT=9-1/2,ROT=1-1/4,103 DEG	GOOD	99	100	100		THE ELECTROSTATIC SEPARATOR DID A FINE JOB OF REMOVING CRANESBILL FROM TURNIP.
				GERANIUM		CRANESBILL		VELVET ROLL		POOR					
				GERANIUM		CRANESBILL		PNEUMATIC		POOR					
				GERANIUM		CRANESBILL		VIBRATORY		POOR					
448	BRASSICA	RAPA	TURNIP				SEPARATE THE LOT INTO FRACTIONS.								A 1/14 SCREEN WILL HOLD ABOUT 4%(THE LARGE SEEDS), A 1/16 HOLDS ABOUT 38%, A 1/17 HOLDS ABOUT 36% AND A 1/19 HOLDS ABOUT 19%, DROPPING ABOUT 3%.
311	BRASSICA		RAPESEED	AMARANTHUS		PIGWEED	REMOVE LAMBSQUARTER AND PIGWEED.	SCREEN	6X19 WIRE MESH	GOOD					THE 6X19 SCREEN AND THE VIBRATOR BOTH WORKED QUITE WELL ON THIS MIXTURE. BASED ON SIMILAR SEPARATIONS, OTHER RECOMMENDED MACHINES ARE THE DRAPER AND THE SPIRAL. THE VELVET ROLL WOULD NOT BE AS EFFECTIVE AS THESE OTHERS.
				CHENOPODIUM	ALBUM	LAMBSQUARTER		SCREEN	6X19 WIRE MESH	GOOD					
				AMARANTHUS		PIGWEED		VIBRATORY		GOOD					
				CHENOPODIUM	ALBUM	LAMBSQUARTER		VIBRATORY		GOOD					
316	BRASSICA		RAPESEED	AMARANTHUS		PIGWEED	REMOVE PIGWEED.	SPIRAL							SAMPLE WAS SEPARATED WITH THE SPIRAL. FRACTIONS SENT TO SUBMITTER FOR EVALUATION.
317	BRASSICA		RAPESEED	AMARANTHUS		PIGWEED	REMOVE PIGWEED.	SPIRAL							THE SEPARATION WAS MADE USING THE SPIRAL. FRACTIONS SENT TO SUBMITTER FOR EVALUATION.
657	BRASSICA		DOMESTIC MUSTARD	BRASSICA	RAPA	WILD MUSTARD	REMOVE WILD MUSTARD	VIBRATORY		FAIR		99			FRICTION, BOUNCE PLATE, ELECTROSTATIC AND SPIRAL SEPARATORS WERE INEFFECTIVE. THE VIBRATOR SEPARATOR YIELDED BEST RESULTS WITH 99% OF THE WILD MUSTARD REMOVED, BUT WITH A CROP LOSS OF 46%.
1136	BRASSICA		RADISH	BRASSICA		RADISH	REMOVE SKINNED SEED WITH COLOR SORTER	COLOR SORTER	UV HEAD DARK BLUE FILTER	GOOD	96	80	99	THE SAMPLE WAS SCREENED AND BLOWN WITH 3 INCH PNEUMATIC COLUMN ALSO	USE COLOR SORTER WITH UV HEAD TO REMOVE RADISH WITH CRACKED SEED COATS
1025	BRASSICA		FLORIDA BROADLEAF MUSTARD	GALIUM		BEDSTRAW	REMOVE BEDSTRAW AND CUTLEAF GERANIUM	SPIRAL		GOOD		100	100	REMOVE ALL BEDSTRAW. LOWER CUTLEAF GERANIUM FROM 6000/LB TO 0.10% OR LESS.	
				GERANIUM	DISSECTUM	CUTLEAF GERANIUM									
				GALIUM		BEDSTRAW		VIBRATORY	CANVAS DECK	GOOD		100	100		
				GALIUM		BEDSTRAW		MAGNETIC	50G SEED, 1G FE 1G WATER	FAIR		90			
1052	BRASSICA		MUSTARD	GERANIUM	DISSECTUM	CUTLEAF GERANIUM	REMOVE CUTLEAF GERANIUM							THIS WAS A TELEPHONE QUERRY. SEVERAL RECCOMENDATIONS WERE MADE BASED ON EARLIER RECORDS OF BRASSICA SEPARATIONS	
767	BRASSICA		MUSTARD	INERT		INERT	REMOVE INERT MATERIAL AND CONTAMINANT SEED	SPIRAL		GOOD		89	99	6X20 SCREEN USED TO REMOVE LAMB'S-QUARTERS BEFORE USING INDENT.	THE SPIRAL OR INDENT COULD BE USED TO REMOVE MISCELLANEOUS CONTAMINANTS FROM MUSTARD. THE INDENT MAY BE SLIGHTLY PREFERABLE BECAUSE OF HIGHER CAPACITY AND HIGHER SELECTIVITY (.72 AS COMPARED TO .68 FOR THE SPIRAL).
				INERT		INERT		SCREEN	SEQ. 6X20 WIRE MESH SCR						
				INERT		INERT		INDENT CYLINDER	SEQ. #4 PUNCHED INDENT	GOOD					
321	BRASSICA		MUSTARD	LYCHNIS	ALBA	WHITE COCKLE	REMOVE COCKLE.			FAIR		100	100		THE PNEUMATIC SEPARATOR WAS ABLE TO SALVAGE 35% OF THE MUSTARD FREE OF COCKLE. THE COLOR SORTER CAN MAKE A SEPARATION (NO RESULTS REPORTED), BUT THE RATE IS ONLY 35 TO 45LB/HR.
				LYCHNIS	ALBA	WHITE COCKLE		ELECTROSTATIC		POOR		100	100		
926	BRASSICA		RAPESEED	MISC		MISC	SALVAGE CROP SEED FROM SCREENINGS (ABOUT 20% PURITY).	AIR-SCREEN	SEQ.7/64 OVER 1/14 RD HOLE	GOOD	20				THE AIR-SCREEN MACHINE AND INDENT CYLINDER WERE ABLE TO SALVAGE ABOUT 90% OF THE RAPESEED FROM THIS SAMPLE OF SCREENINGS AT 90% PURITY. FURTHER CLEANING WAS ACCOMPLISHED WITH THE DRAPER, BUT THE VELVET ROLL OR SPIRAL COULD ALSO BE USED.
				MISC		MISC		INDENT CYLINDER	SEQ.#10 CYLINDER	GOOD		98	90		
				MISC		MISC		DRAPER	SEQ.	GOOD	90		95		
1024	BROMUS	CARINATUS	CALIFORNIA BROME	INERT		INERT	REMOVE INERT MATERIAL	SCREEN	9/64 RH 1/18 RH 4X20 WW	GOOD	50	90	95	THIS WAS A SAMPLE FOR THESIS WORK. TO BE USED TO DETERMINE THE EFFECTS OF TEMPERATURE AND SEEDING DEPTH ON HERBICEDE APPLICATION.	USE SCREENS TO CLEAN BROMUS CARINATUS
				INERT		INERT		PNEUMATIC	ESM	POOR					
1264	BROMUS	CARINATUS													

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42	BROMUS	CATHARTICUS	RESCUEGRASS	AVENA	SATIVA	OATS	REMOVE OATS AND WILD OATS.	GRAVITY		FAIR	74	50	88		BEST RESULTS WERE HAD ON THE GRAVITY TABLE, ALTHOUGH THIS WAS STILL NOT SATISFACTORY.
								SCREENS		POOR					
								VELVET ROLL		POOR					
								PNEUMATIC		POOR					
								DRAPER	PLASTIC BELT	POOR					
								ELECTROSTATIC	VARIOUS VOLT/ELECTRODE POSITION	POOR					
								INDENT DISC		POOR					
334	BROMUS	INERMIS	SMOOTH BROME	TRASH		TRASH	REMOVE RYEGRASS	SCREEN	SEQ.4X18	FAIR	63				BEST RESULTS BY SCALPING THE LOT WITH A 4X18, DROPPING SMALL RYEGRASS WITH A 1/14 AND LIFT CROP IN THE PNEUMATIC SEPARATOR.
				LOLIUM		RYEGRASS		SCREEN	SEQ.1/14 ROUND-HOLE	FAIR					
				LOLIUM		RYEGRASS		PNEUMATIC	SEQ.	FAIR			99		
206	BROMUS		BROMEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	SCREEN	1/15 RD-HOLE W/1/8X1/4" DAMS	GOOD					OF VARIOUS SCREENS TRIED, THE 1/15 ROUND-HOLE WITH DAMS GAVE THE BEST RESULTS.
365	BROMUS		BROMEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS.	SCREEN	1/13" ROUND-HOLE	FAIR		100	100		THE 1/13" SCREEN SALVAGED 60% OF THE BROME FREE OF QUACKGRASS. A 1/13" SCREEN WITH DAMS TO UPEND THE QUACKGRASS SHOULD SAVE MORE OF THE BROME.
124	BROMUS		LINCOLN BROMEGRASS	BROMUS	SECALINUS	CHEATGRASS	REDUCE CHEATGRASS	PNEUMATIC		GOOD	95	95	100		BEST RESULTS WERE WITH THE PNEUMATIC SEPARATOR. THE AIR-SCREEN MACHINE DID ALMOST AS WELL, BUT HAD MORE CROP LOSS.
				BROMUS	SECALINUS	CHEATGRASS		AIR-SCREEN	1/15 W/DAMS, 440RPM	FAIR	95	82	99		
				BROMUS	SECALINUS	CHEATGRASS		VIBRATORY	FINE DECK	POOR					
				BROMUS	SECALINUS	CHEATGRASS		ELECTROSTATIC		POOR					
501	BROMUS		BAYLOR BROME	BROMUS		DOWNY BROME	REMOVE DOWNY BROME.	SCREEN	1/14 ROUND-HOLE	GOOD		80			RESULTS WERE GOOD WITH THE 1/14 ROUND-HOLE SCREEN WITH DAMS.
502	BROMUS		BAYLOR BROME	BROMUS		DOWNY BROME	REMOVE DOWNY BROME	SCREEN	1/14 ROUND-HOLE	GOOD		67			THE 1/14 ROUND-HOLE SCREEN WITH DAMS PERFORMED WELL. A 1/13 ROUND-HOLE MIGHT DROP MORE CONTAMINANT, ALTHOUGH WITH MORE CROP LOSS.
950	BROMUS		BROME	INERT		SOIL	REMOVE SOIL, WHEAT, WILDOAT	INDENT CYLINDER	6MM	GOOD				6MM INDENT CYLINDER REMOVED ALL CONTAMINANTS EXCEPT WHEAT AND WILDOAT. GRAVITY GAVE FAIR REMOVAL OF SOIL AND WHEAT BUT NOT OTHER CONTAMINANTS.	USE 6 MM INDENT TO REMOVE SOIL AND MISCELLANEOUS CONTAMINANTS. USE GRAVITY TABLE FOR PARTIAL REMOVAL OF WHEAT.
				INERT		SOIL		GRAVITY		FAIR					
				TRITUCUM	AESTIVUM	WHEAT		GRAVITY		FAIR					
				MISCELLANEOUS				INDENT CYLINDER	6MM	GOOD					
792	BROMUS		REGAR BROMEGRASS	MISC.		MISC.	REMOVE WILD OATS, DOWNY BROME, ORCHARDGRASS,WHEAT, BARLEY, ETC.	SCREEN	SEQ.1/18X3/4 SLOTTED SCR	GOOD	100	90	100		90% OF THE WILD OAT AND AN UNDETERMINED % OF WHEAT, BARLEY AND DOCK WERE REMOVED WITH THE 1/18X3/4 SLOTTED SCREEN AND A PORTION OF THE SMALLER CONTAMINANT SEEDS WERE REMOVED BY THE 4X20 WOVEN WIRE SCREEN. TOTAL CROP LOSS WAS ABOUT 10%.
				MISC.		MISC.		SCREEN	SEQ.4X20 WOVEN WIRE SCR	GOOD					
436	BUCHLOE	DACTYLOIDES	BUFFALOGRASS	INERT		INERT	REMOVE INERT MATERIAL.	SCREEN	1/12X1/2 SLOT	POOR				INDENT DISC AND CYLINDERS ARE NOT POSSIBILITIES BECAUSE THERE IS NOT ENOUGH LENGTH DIFFERENCE IN THE SEEDS.	NO SUCCESS WITH THIS PROBLEM. BEST RESULTS WERE WITH THE 1/12X1/2 SLOTTED SCREEN WHICH DROPPED 25% OF THE LOT COMPOSED MOSTLY OF INERT MATERIAL.
				INERT		INERT		DRAPER		POOR					
				INERT		INERT		VELVET ROLL		POOR					
				INERT		INERT		VIBRATORY		POOR					
				INERT		INERT		PNEUMATIC		POOR					
				INERT		INERT		ELECTROSTATIC		POOR					
593	CALAMAGROSTIS		REEDGRASS	WEEDS		WEEDS	REMOVE ASSORTED WEEDS.	INDENT CYLINDER	#4 CYLINDER	FAIR	57		99	THE SAMPLE WAS A MIXTURE OF CALAMAGROSTIS AND ARCTAGROSTIS WITH ASSORTED WEED SEEDS.	THE SPECIAL INDENT CYLINDER (1/17 R.H. X 26 GA.) WORKED THE BEST ON THIS MIXTURE YIELDING A 96.5% FINAL PURITY WITH 14.2% CROP LOSS.
				WEEDS		WEEDS		INDENT CYLINDER	SPECIAL INDENT CYL. 1/17X26GA.	GOOD	57		97		
				WEEDS		WEEDS		INDENT CYLINDER	SEQ. SPECIAL INDENT CYL.						
				WEEDS		WEEDS		PNEUMATIC	SEQ.	FAIR	57		97		
631	CALOPOGONIUM	MUCUNOIDES	TROPICAL FORAGE LEGUME	CLODS		CLODS	REMOVE DIRT CLODS.	FRICTION	1 PASS, FIBRE-TRAN BELT, FOAM BAR	GOOD	39		99		BEST RESULTS WERE OBTAINED WITH THE FRICTION SEPARATOR AND VELVET ROLLS. BOTH WERE ABLE TO REMOVE ALL DIRT CLODS WITH ABOUT 27% LOSS. OTHER SEPARATORS WERE INEFFECTIVE.
				CLODS		CLODS		FRICTION	2 PASSES	GOOD	39		100		
				CLODS		CLODS		VELVET ROLL	1 PASS	GOOD	39		100		
				CLODS		CLODS		VELVET ROLL	2 PASSES	GOOD	39		100		
428	CAPSICUM		PEPPER	CAPSICUM		PEPPER	REMOVE LOW-GERMINATION SEED.	ELECTROSTATIC							THE ELECTROSTATIC AND PNEUMATIC SEPARATORS SEEM TO HAVE THE BEST CHANCE OF RAISING THE GERMINATION. NO RESULTS AVAILABLE, HOWEVER.
				CAPSICUM		PEPPER		PNEUMATIC							

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
644	CAPSICUM		PEPPER	CAPSICUM		PEPPER	REMOVE DARK COLORED SEED	COLOR SORTER		FAIR				AIR SEPARATOR, SCREENS AND ELECTROSTATIC SEPARATOR WERE UNSUCCESSFUL.	THE COLOR SORTER SHOWED LIMITED PROMISE. A MORE SELECTIVE SORTER MIGHT BE MORE EFFECTIVE.
732	CAPSICUM		CAYENNE PEPPER	N/A		N/A	THRESH CAYENNE PEPPERS ON BELT THRESHER	BELT THRESHER	VARIOUS BELT SPACINGS, 1/8" TO 1/2"					IN ADDITION, A THRESHED SAMPLE WAS SCREENED OVER #40 ROUND HOLE SCREEN, THEN EXPOSED TO 500 FPM AIR COLUMN WITH GOOD RESULTS.	BELT THRESHER WAS EFFECTIVE IN THRESHING PEPPERS W/O TOO MUCH PULVERIZING OR GRINDING. SAMPLES CAN BE PROCESSED FURTHER BY PNEUMATIC SEPARATION AND SCREENING.
1153	CAREX	APERTA	COLUMBIA SEDGE	CAREX	ATERTA	COLUMBIA SEDGE	REMOVE ENTIRE HULL FROM SEED	SCARIFIER	LAH W/#12 MANTLE	GOOD					
310	CARTHAMUS	SATIVUS	SAFFLOWER			OFF-WHITE SEED	REMOVE THE OFF-WHITE SEEDS.	COLOR SORTER	SORTEX, SENS=5, PULSE=1, A.R. #6	GOOD		100	100		THE SORTEX COLOR SORTER APPEARED TO REMOVE ALL THE WHITE SEEDS FROM THE SAFFLOWER SEED WITH VERY LITTLE LOSS.
199	CARTHAMUS	TINCTORIUS	SAFFLOWER	HULLS		HULLS	REMOVE HULLS FROM SAFFLOWER MEAL.	SCREEN	SEQ.34X34						FRACTIONS FROM ALL STEPS IN THE SEQUENCE WERE SENT TO SUBMITTER FOR EVALUATION.
				HULLS		HULLS		PNEUMATIC	SEQ.FRACT. HELD BY SCREEN						
				HULLS		HULLS		INDENT CYLINDER	SEQ.FRACT. THRU SCREEN, .027"DIAMX.012" POCKETS						
				HULLS		HULLS		ELECTROSTATIC							
				HULLS		HULLS		VIBRATORY		POOR					
191	CARTHAMUS	TINCTORIUS	SAFFLOWER	TRITICUM		WHEAT	REMOVE WHEAT	SCREEN	#8-1/2 ROUND HOLE	GOOD		100	100		THE #8-1/2 ROUND HOLE SCREEN RECOVERED 76% OF THE ORIGINAL SAMPLE FREE OF WHEAT AND WITH A VERY SMALL AMOUNT OF SAFFLOWER LOST.
1138	CARUM	CARVI	CARAWAY	SCLEROTINIA		SCLEROTIA	REMOVE SCLEROTIA	COLOR SORTER	#70 FILTER	GOOD	100	82	100	ALTERNATE PHONE NUMBER IN ALBANY 928-3760	THE COLOR SORTER CAN REMOVE ABOUT 80% OF THE SCLEROTIA WITH A SINGLE PASS.
1267	CEANOTHUS	CUNNEATUS													
1268	CEANOTHUS	INTERGERRIMUS													
1128	CENCHRUS	CILIARIS	BUFEL GRASS	HULLS	HULLS	HULLS	DETERMINE BEST METHOD, SUITABLE FOR USE IN AFRICAN PEASANT COOPERATIVES AND ASSOCIATIONS, FOR THRESHING AND CLEANING SEED.	OTHER	SEQ1.BRUSH MACHINE, 12SQ MANTLE	GOOD		90		R. G. GRIFFITHS' PHONE NO.: 61-32-15.	THE BRUSH MACHINE DEHULLED ALMOST ALL THE SEED WITH NO APPARENT DAMAGE. THE SEED DROPPED THROUGH THE MANTLE. THE 1/16RH SCREEN OVER A 6X32 WW SCREEN, FOLLOWED BY BLOWING YIELDED A SAMPLE ABOUT 95% PURE WITH LITTLE LOSS.
				INERT	INERT	INERT		SCREENS	SEQ1.1/16RH OVER 6X32	GOOD		90			
				INERT	INERT	INERT		PNEUMATIC	SEQ1.	GOOD		90			
				HULLS	HULLS	HULLS		BELT THRESHER	SEQ2.NO CLEARANCE, PEBBLE-TOP	POOR					
742	CERATONIA	SILIQUA	CAROB												
1246	CERCOCARPUS		MT. MAHOGANY	INERT		INERT	DEBEARD AND CLEAN	SCARIFIER	LAH						
675	CHAMAECYPARIS	FORMASENSIS		INERT		INERT	REMOVE SEGMENTED STEM PIECES	VELVET ROLL		GOOD		80		THE VIBRATOR, INCLINED DRAPER AND FRICTION SEPARATORS WERE UNSATISFACTORY. SEE PROBLEM SAMPLES #1056 AND #1057 (FORMERLY PART OF #675) FOR SIMILAR PROBLEMS.	BEST RESULTS WERE OBTAINED WITH THE VELVET ROLLS WHICH REMOVED 80% OF THE INERT MATERIAL WITH A LOSS OF 20%.
				INERT		INERT		PNEUMATIC		FAIR		50			
1056	CHAMAECYPARIS	TAIWANENSIS		INERT		INERT	REMOVE SEGMENTED STEM PIECES.	VELVET ROLL		GOOD		90		THIS SAMPLE FORMERLY PART OF #675. SEE #675 AND #1057 FOR SIMILAR PROBLEMS.	BEST RESULTS WERE OBTAINED WITH THE VELVET ROLLS WHICH SALVAGED 95% OF THE SEED AND REMOVED 90% OF THE INERT MATERIAL.
				INERT		INERT		VIBRATORY		FAIR		50			
				INERT		INERT		PNEUMATIC		FAIR					
1196	CHLORIS	GAYANA	RHODESGRASS	CHLORIS	GAYANA	UNTHRESHED RHODESGRASS	THRESH	DEBEARDER	FILAMENT THRESHER	FAIR				THRESHING TESTS WERE REQUESTED FOR THIS MATERIAL. THE FILAMENT	THE BRUSH DEBEARDER GAVE BEST RESULTS FOR THRESHING CHLORIS SEED.
				CHLORIS	GAYANA	UNTHRESHED		DEBEARDER	LAH W/20X20WW MANTLE	GOOD					
723	CHLORIS	GAYANA	RHODESGRASS	DIGITARIA	ADSCENDENS	CRABGRASS	REMOVE DIGITARIA ADSCENDENS	PNEUMATIC		FAIR		80			BASED ON LIMITED TRIALS, THE PNEUMATIC SEPARATOR DOES SOME GOOD, REMOVING ABOUT 80% OF THE CRABGRASS WITH A LOSS OF A THIRD OF THE CROP.
896	CHLORIS	GAYANA	RHODESGRASS	ERAGROSTIS		LOVEGRASS	REMOVE LOVEGRASS.	INDENT CYLINDER	1.25 MM CYLINDER						THE DRAPER AND INDENT CYLINDER BOTH WERE ABLE TO PERFORM THE SEPARATION AT THE NECESSARY CAPACITY, BUT NO PURITY ANALYSIS WAS PERFORMED FOR EITHER TEST.
				ERAGROSTIS		LOVEGRASS		DRAPER	SMOOTH VINYL BELT						
336	CHLORIS	GAYANA	RHODESGRASS	TRASH		TRASH	REMOVE WEEDS AND TRASH.	SCREENS	SEQ.5/64X3/4 OVER 1/12 OVER 1/23	GOOD					EXCELLENT RESULTS WERE OBTAINED BY USING 5/64X3/4, 1/12, AND 1/23 SCREENS TO REMOVE TRASH AND THE VIBRATOR TO REMOVE WEED SEEDS. 94% OF THE CROP WAS SALVAGED AT 99.6% PURITY.
				WEEDS		WEEDS		VIBRATORY	SEQ.FRACT OVER 1/23	GOOD			100		
1147	CHRYSANTHEMUM	CINERARIAEFOLIUM	PYRETHRUM	CHRYSANTHEMUM	CINERARIAEFOLIUM	PYRETHRUM	DETERMINE THRESHING AND CLEANING SEQUENCE	SCARIFIER	LAH W/#7 MANTLE	GOOD				TWO LOTS WERE CONDITIONED: ONE WAS UNTHRESHED AND THE OTHER WAS PREVIOUSLY THRESHED. THIS MATERIAL WAS SEED FOR INCREASE. THE LAH SCARIFIER DID A GOOD J	USE BRUSH DEBEARDER FOR THRESHING SEED FROM THE FLOWER HEADS AND AIR-SCREEN WITH #7RH TOP AND 24X24WW BOTTOM WITH LIGHT AIR APPROX 250 FPM
				CHRYSANTHEMUM	CINERARIAEFOLIUM	PYRETHRUM		AIR-SCREEN	#7 TOP, 24X24WW BOTTOM AND AIR	GOOD					

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1244	CHRYSANTHEMUM	CINERARIAEFOLIUM	PYRETHRUM	INERT			USE AIR COLUMN TO REMOVE INERT MATERIAL FROM BREEDER LOTS OF PYRETHRUM SEED.							THESE ARE LOTS IN THE AREA OF A FEW GRAMS	
1270	CHRYSANTHEMUM	CINERARIEFOLIUM	PYRETHRUM	CHRYSANTHEMUM	CINERARIAEFOLIUM	PYRETHRUM	DETERMINE CLEANING SEQUENCE								
911	CHRYSANTHEMUM	LEUCANTHEMUM	OXEYE DAISY	INERT		INERT	CLEAN SEED.	SCREENS	SEQ.6X24 OVER 6X34 WOVEN WIRE	GOOD					SCREENING FOLLOWED BY INDENT CYLINDER YIELDED VERY GOOD RESULTS. A 1.25MM CYLINDER YIELDED 99+% PURE CROP WITH 9% LOSS. A 1.6MM CYLINDER WILL YIELD GREATER PURITY BUT A CROP LOSS OF 17%.
				INERT		INERT		INDENT CYLINDER	SEQ.1.25MM CYLINDER	GOOD			99		
991	CHRYSANTHEMUM	SPP		RUMEX	SPP	DOCK	REMOVE THE DOCK AND CHICKWEED COMPLETELY. REDUCE THE OTHER WEEDSÿAS MUCH AS POSSIBLE	INDENT CYLINDER	2MM POCKET						IT APPEARS THAT THE NOXIOUS WEEDS (RUMEX AND STELLARIA) CAN BEÿCOMPLETELY REMOVED USING THE INDENT CYLINDER. RUMEX ALONE CAN BEÿREMOVED COMPLETELY WITH THE 1/23 ROUND HOLE SCREEN.
				STELLARIA	MEDIA	CHICKWEED		SCREEN	1/23 ROUND HOLE						
1049	CHRYSANTHEMUM		EDIBLE CHRYSAMTHEMUM	ANTHEMIS	COTULA	DOGFENNEL	REMOVE DOGFENNEL	PNEUMATIC		GOOD				THIS SAMPLE CONTAINED HEADS OF DOGFENNEL THAT WERE SIMILAR IN SIZE AND SHAPE TO THE CROP. A SEQUENCE	USE PNEUMATIC AND BRUSH MACHINE TO REMOVE DOGFENNEL FROM CHRYSANTHEMUM.
				ANTHEMIS	COTULA	DOGFENNEL		SCARIFIER	LA-H #12 MANTLE	GOOD					
1207	CHRYSANTHEMUM		EDIBLE CHRYSANTHEMUM	INERT		CHAFF	REMOVE INERT; REMOVE WILD BUCKWHEAT	SCREEN	4X20 OR 4X22 WW	FAIR				THREE SAMPLES OF EDIBLE CHRY.:FIELD RUN, SMALL SEED FROM LIGHT END OF GRAVIT	
				POLYGONUM	CONVOLVULUS	WILD BUCKWHEAT		SCREEN	1/16X1/2 SLOT	GOOD		99			
1017	CHRYSANTHEMUM		SHASTA DAISY												
600	CHRYSOTHAMNUS		RABBITBRUSH	AWNS		AWNS	REMOVE AWNS	PNEUMATIC	SEQ.	GOOD				THRESHING THE SAMPLE BEFORE ANY KIND OF SEPARATION BROKE UP HULLS AND STEMS WHICH WERE DIFFICULT TO REMOVE FROM THE SEED, SO THRESHING WAS DONE AFTER A SEPARATION.	THE BEST PROCEDURE SEEMED TO BE A SE
				AWNS		AWNS		BELT THRESHER	SEQ.	GOOD					
				AWNS		AWNS		PNEUMATIC	SEQ.	GOOD					
554	CICHORIUM	ENDIVA	ENDIVE	SORGHUM	HALEPENSE	JOHNSONGRASS	REMOVE JOHNSON GRASS.	VIBRATORY	SANDPAPER DECK	GOOD		100	100	VELVET ROLL, AIR COLUMN, ELECTROSTATIC, FRICTION AND CHUTE SEPARATORS WERE INEFFCTIVE.	THE VIBRATOR REMOVED ALL JOHNSONGRASS WITH 13% LOSS AND THE DRAPER WAS ABLE TO REDUCE THE JOHNSONGRASS TO 63 PER POUND WITH A 24% LOSS.
				SORGHUM	HALEPENSE	JOHNSONGRASS		DRAPER		GOOD					
667	CINERARIA	MARITIMA	DUSTY MILLER	AMARANTHUS		PIGWEED	REMOVE GRASS SEED AND PIGWEED	FRICTION		GOOD					FRACTIONS FROM EACH TRIAL WERE SENT TO SUBMITTER FOR EVALUATION.
								VIBRATORY							
									SPECIAL INDENT	GOOD					
								INDENT CYLINDER	#4 INDENT						
1174	CITRULLUS	LANATUS	WATERMELLON				CHARACTERIZE 8 VARIETIES OF WATERMELLON WITH MVS								
1080	CLEMATIS		CLEMATIS					INDENT CYLINDER							
972	CORNUS	NUTTALLI	PACIFIC DOGWOOD	CORNUS	NUTTALLII	BRUISED PACIFIC DOGWOOD	REMOVE BRUISED DOGWOOD BERRIES	COLOR SORTER		FAIR				A COLOR SORTER IS THE ONLY MACHINE CAPABLE OF REMOVING BRUISED (BLACK) BERRIES FROM THE NORMAL RED BERRIES. THERE IS SOME DIFFICULTY FEEDING THE MATERIAL AND MULTIPLE RUNS ARE REQUIRED TO REDUCE LOSS AND IMPROVE THE PERCENTAGE OF BRUISED BERRIES REMOVED	USE COLOR SORTER TO REMOVE BRUISED DOGWOOD BERRIES
450	CORONILLA	VARIA	CROWNVETCH	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS.	BELT THRESHER	SEQ.	GOOD				ATTEMPT WAS MADE TO PERFORM THE SEPARATION BEFORE DE-HULLING THE VETCH, BUT CROP LOSS WAS ABOUT 30%.	THE BELT THRESHING/SCREENING/PNEUMATIC/VIBRATOR SEQUENCE DID A GOOD JOB RECOVERING 90% OF THE CROWNVETCH. ALTHOUGH A FEW QUACKGRASS WERE LEFT IN THE LOT, THEY WERE LARGE AND AN R5 INDENT DISC OR A #12 INDENT CYLINDER SHOULD REMOVE THESE READILY.
				AGROPYRON	REPENS	QUACKGRASS		SCREENS	SEQ.1/12 OVER 1/20 RH	GOOD					
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC	SEQ.	GOOD					
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY	SEQ.DROPPED FRCT FROM PNEU.	GOOD					
476	CORONILLA	VARIA	CROWN VETCH	CIRSIUM	ARVENSE	CANADA THISTLE	REMOVE CANADA THISTLE	PNEUMATIC		GOOD				SCREENS, ELECTROSTATIC, DRAPER AND VIBRATOR WERE INEFFECTIVE.	THE PNEUMATIC SEPARATOR WAS VERY EFFECTIVE. THE MAGNETIC SEPARATOR SHOWS PROMISE AND WITH MORE WORK WOULD PROBABLY DO QUITE WELL.
				CIRSIUM	ARVENSE	CANADA THISTLE		MAGNETIC	#6 POWDER	FAIR		60			
774	CORONILLA	VARIA	CROWN VETCH	CIRSIUM	ARVENSE	CANADA THISTLE	REMOVE CANADA AND BULL THISTLE	PNEUMATIC		POOR		20			SCREENING FOLLOWED BY GRAVITY TABLE WILL REMOVE MOST OF THE THISTLE, BUT CROP LOSSES COULD OVER 50%.
				CIRSIUM	VULGARE	BULL THISTLE		SCREEN	SEQ. 6X22 WIRE MESH	FAIR					

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453	CORONILLA	VARIA	CROWNVETCH	CORONILLA	VARIA	CROWNVETCH FRAGMENTS	REMOVE BROKEN CROWNVETCH, DOCK, RED CLOVER, ETC.	GRAVITY	SEQ. COARSE DECK, AIR=4, SPEED=550, SIDESLOPE=8, BACKSLOPE=2	GOOD				THE V-3-1/2 DISC ALSO LOOKED VERY GOOD IN LIFTING SHORT MATERIAL.	THE #6 INDENT CYLINDER PERFORMED VERY WELL, YIELDING A CLEAN FRACTION THAT APPEARED TO HAVE NO CONTAMINANTS IN IT.
				RUMEX		DOCK		INDENT CYLINDER	#6 CYLINDER	GOOD					
				TRIFOLIUM	PRATENSE	RED CLOVER		INDENT CYLINDER	#6 CYLINDER	GOOD					
420	CORONILLA	VARIA	CROWNVETCH	INERT		BROKEN MATERIAL	REMOVE LIGHT AND BROKEN MATERIAL.	INDENT CYLINDER	SEQ.#7 CYLINDER	FAIR					THE #7 INDENT AND THE PNEUMATIC SEPARATOR DID THE BEST AND THE FINAL PRODUCT MAY BE ACCEPTABLE.
				INERT		LIGHT MATERIAL		PNEUMATIC	SEQ.	FAIR					
				INERT		INERT		VIBRATORY		POOR					
435	CORONILLA	VARIA	CROWNVETCH	INERT		INERT	THRESH AND CLEAN SEED.	BELT THRESHER	SEQ.	GOOD					THE SAMPLE WAS BELT THRESHED, BLOWN IN THE PNEUMATIC SEPARATOR, AND SCREENED ON 1/12 AND 1/22 ROUND-HOLE SCREENS WITH GOOD RESULTS.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
				INERT		INERT		SCREENS	SEQ.1/12 OVER 1/22 RH	GOOD					
454	CORONILLA	VARIA	CROWNVETCH	INERT		INERT	THRESH AND CLEAN LOT.	BELT THRESHER	SEQ.	GOOD					AFTER THRESHING, THE LOT WAS BLOWN AND SEEDS STILL IN THE HULL WERE RE-THRESHED. ABOUT 75% OF THE LOT WAS SALVAGED IN THIS WAY.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
				INERT		INERT		BELT THRESHER	SEQ.REJECT FROM PNEUMATIC	GOOD					
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
393	CORONILLA	VARIA	CROWNVETCH	LOLIUM		RYEGRASS	REMOVE RYEGRASS AND RUSSIAN THISTLE								MEASUREMENTS ONLY.
				SALSOLA	KALI TENUIFOLIA	RUSSIAN THISTLE									
455	CORONILLA	VARIA	CROWNVETCH	TRIFOLIUM	PRATENSE	RED CLOVER	REMOVE RED CLOVER, MUD CLODS, MALLOW, DOCK, LAMBSQUARTER AND INERT MATERIAL. THESE COMPRISE ABOUT 80% OF THE LOT.	INDENT CYLINDER	SEQ.#6 CYLINDER	GOOD					THE #6 INDENT CYLINDER LIFTED ABOUT 75% OF THE LOT, ALMOST ALL WAS CONTAMINANT, AND THE PNEUMATIC SEPARATOR LIFTER ANOTHER 3%. 22% OF THE LOT WAS SALVAGED AS CLEAN SEED.
				INERT		INERT		PNEUMATIC		GOOD					
				RUMEX		DOCK									
				MALVA		MALLOW									
				CHENOPODIUM	ALBUM	LAMBSQUARTER									
1094	CREPIS	ALPINA		CREPIS	ALPINA	UNDEBEARDED CREPIS ALPINA	DEBEARD CREPIS ALPINA	DEBEARDER	LAH WITH #14 SCREEN	GOOD				LOT SIZE WAS FIVE POUNDS. MATERIAL NEEDED TO BE DEBEARDED BEFORE PLANTING.	USE BRUSH-TYPE DEBEARDER TO DEBEARD CREPIS ALPINA.
119	CROTALARIA	SPECTABILIS	EARLY SPECTABILIS CROTALARIA				DETERMINE SIZE DISTRUBUTION OF SEED LOT.								THE SMALLEST SCREENS THAT WOULD PASS ALL THE CROTALARIA WERE A #12 ROUND HOLE AND A 6/64X3/4 ELONGATED HOLE.
118	CROTALARIA	STRIATA	GIANT STRIATA CROTALARIA				DETERMINE SIZE DISTRIBUTION OF SEED LOT.								THE SMALLEST SCREENS THAT WOULD PASS ALL THE CROTALARIA WERE THE #9 ROUND HOLE AND 2X10 ELONGATED HOLE. A #7 ROUND HOLE PASSED 96% AND A 4X16 PASSED 61%.
576	CUCUMIS	SATIVUS	CUCUMBER	CUCUMIS	SATIVUS	SPLIT CUCUMBER SEED	REMOVE SPLIT CUCUMBER SEED FROM GOOD SEED.	MAGNETIC		POOR					MAGNETIC, COLOR, PNEUMATIC, AND FRICTION SEPARATORS WERE INEFFECTIVE IN SEPARATING SP
								COLOR SORTER		POOR					
								PNEUMATIC		POOR					
								FRICTION		POOR					
628	CUCUMIS	SATIVUS	CUCUMBER	DISEASED SEED		DISEASED SEED	REMOVE BLACK DISEASED SEED PARTICLES AND OTHER BLACK INERT PIECES.	SCREEN	SEQ. 5 1/2 X 3/4					AIR, VIBRATOR AND FRICTION SEPARATORS WERE INEFFECTIVE IN THIS PROBLEM	THE BEST RESULTS WERE OBTAINED WITH 5 1/2 X 3/4 AND 1/18 X 3/4 SCREENS WHICH REMOVED ABOUT HALF THE DISEASED SEED WITH RELATIVELY LOW CROP LOSS.
								SCREEN	SEQ. 1/18 X 3/4	FAIR		50			
645	CUCUMIS		CUCUMBER				REMOVE BROKEN SEEDS	INDENT DISC	A SIZE DISK	GOOD		93	94	AIR SEPARATOR AND SCREENS WERE INEFFECTIVE.	INDENT DISK REMOVED 93% OF THE BROKEN SEED WITH 25% LOSS. THE INDENT CYLINDER ALSO SHOWED PROMISE.
								INDENT CYLINDER	SPECIAL INDENT CYLINDER	GOOD					
847	CUCURBITA	PEPO	PUMPKIN	CUCURBITA		SQUASH	REMOVE SQUASH SEED WITH COLOR SORTER.	COLOR SORTER	WRATTEN #47-B FILTER, REJECT: LIGHT, LIGHT SENS.: 75, DELAY: 28	GOOD					THE COLOR SORTER CAN EASILY MAKE THE SEPARATION OF SQUASH SEED FROM PUMPKIN.
1039	CUCURBITA	PEPO	PUMPKIN	INERT		INERT	REMOVE INERT MATERIAL: PIECES OF SKIN	FRICTION	1 FT. WIDE, CARPET BELT, FOAM BAR	GOOD		87	99	PROCESSOR REQUIRED LESS THAN 5% CROP LOSS AND LESS THAN .25% CONTAMINANT. THIS REPORT FORMERLY UNDER SAMPLE #749.	THE FRICTION SEPARATOR GAVE A PRODUCT MEETING THE PROCESSOR'S REQUIREMENTS.
				INERT		INERT		COLOR SORTER		FAIR		95	99		
				INERT		INERT		MAGNETIC		FAIR		76	100		
				INERT		INERT		VIBRATORY	SANDBLASTED AL. DECK	FAIR		73	100		
543	CUCURBITA		BUTTERCUP SQUASH	INERT		INERT	REMOVE BLACK INERT MATERIAL (RIND AND PULP).	COLOR SORTER	2 PASSES, RERUNNING DISCARD	GOOD			100		ALL SEPARATION TRIALS LOOKED VERY GOOD WITH SALVAGE RATES OF 92 TO 100% AND PURITIES OF 99% OR BETTER DEPENDING ON THE PROCEDURE.
				INERT		INERT		FRICTION	2 PASSES, RERUNNING DISCARD	GOOD			99		
				INERT		INERT		ELECTROSTATIC	SEQ.	FAIR			100		
				INERT		INERT		SCREEN	SEQ. 7/64X3/4	GOOD			99		
				INERT		INERT		SCREEN	6 1/2 /64X3/4	FAIR			99		

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
749	CUCURBITA		SQUASH	INERT		INERT	REMOVE INERT MATERIAL: PIECES OF SKIN	FRICTION	ONE FOOT WIDE, CARPET BELT, FOAM BAR	GOOD		85	100	PROCESSOR REQUIRED LESS THAN 5% CROP LOSS AND LESS THAN .25% CONTAMINANT.	SEPARATION ON THE FOOT WIDE FRICTION SEPARATOR MET THE REQUIREMENTS OF THE PROCESSOR.
				INERT		INERT		FRICTION	FOUR FOOT WIDE, CARPET BELT, BRUSH BAR	FAIR		82	100		
				INERT		INERT		COLOR SORTER		POOR		90	100		
722	CUCURBITA		SQUASH	SCLEROTIA		SCLEROTIA	REMOVE SCLEROTIA	ELECTROSTATIC	15KV 3/4" FROM BELT	GOOD		99		FRICTION, VELVET ROLLS, INCLINED DRAPER AND SCREENS WERE INEFFECTIVE.	THE ELECTROSTATIC SEPARATOR YIELDED EXCELLENT RESULTS, REMOVING ALMOST 100% OF THE SCLEROTIA WITH ONLY 1% CROP LOSS.
				SCLEROTIA		SCLEROTIA		OTHER	PRECISION GRADER	POOR		65			
646	CUCURBITA	SCLEROTIA	SQUASH				REMOVE SEEDS WITH SPLIT COATS.	FRICTION		POOR					BEST RESULTS WERE OBTAINED WITH A 10/64X3/4 SLOTTED-HOLE SCREEN OVER A 9/64X3/4 SLOTTED-HOLE SCREEN. 77% OF THE CRACKED SEED COAT SEEDS WERE REMOVED YIELDING A PURITY OF 93.6%.
								PNEUMATIC		POOR					
								SCREENS	10/64X3/4 OVER A 9/64X3/4	FAIR	80	77	94		
819	CYNARA	SCOLYMUS	ARTICHOKE	INERT		INERT	DETACH SEEDS FROM HEAD AND CLEAN	BELT THRESHER	SEQ.	GOOD					THE BELT THRESHER EFFECTIVELY DETACHED THE SEED FROM THE HEADS. THE SEED WAS CLEANED USING SCREENS. SINCE THERE IS SOME DIFFERENCE IN SEED SIZE AMONG THE ARTICHOKE HEADS, THE OPTIMUM SCREEN SIZE WILL PROBABLY VARY.
								SCREEN	SEQ. #20 RD HOLE	GOOD					
								SCREEN	SEQ. #12 RD HOLE	GOOD					
								SCREEN	SEQ. #9 RD HOLE	GOOD					
1090	CYNARA	SCOLYMUS	ARTICHOKE				REMOVE SEEDS FROM ARTICHOKE SEED HEAD.								
193	CYNODON	DACTYLON	COMMON BERMUDAGRASS	CYNODON	DACTYLON ARIDUS	GIANT BERMUDAGRASS	SEPARATE COMMON BERMUDAGRASS FROM GIANT BERMUDAGRASS.	ELECTROSTATIC	20KV,VER=10,HOR=4,ROT=1-3/4	GOOD			94		THE ELECTROSTATIC SEPARATOR PERFORMED THE BEST YIELDING 93% OF THE COMMON BERMUDAGRASS AT 94% PURITY.
				CYNODON	DACTYLON ARIDUS	GIANT BERMUDAGRASS		SCREEN	.026" ROUND-HOLE	FAIR			97		
				CYNODON	DACTYLON ARIDUS	GIANT BERMUDAGRASS		SCREEN	6X36 SLOT	FAIR			91		
				CYNODON	DACTYLON ARIDUS	GIANT BERMUDAGRASS		PNEUMATIC		POOR			87		
				CYNODON	DACTYLON ARIDUS	GIANT BERMUDAGRASS		VIBRATORY		POOR					
705	CYNODON	DACTYLON	COMMON BERMUDAGRASS	CYNODON	DACTYLON ARIDUS	GIANT BERMUDAGRASS	REMOVE GIANT BERMUDAGRASS								SCREENS AND PNEUMATIC SEPARATOR WERE UNABLE TO REMOVE MORE THAN 27% OF THE GIANT BERMUDAGRASS AND DUE TO SMALL SAMPLE SIZE, FURTHER TESTS WERE NOT POSSIBLE.
1204	CYNODON	DACTYLON	BERMUDA GRASS	INERT			DO GENERAL CLEANING.	AIR-SCREEN	SEQ:18X18WWTOP,6X40WW BOTTOM,AIR	GOOD				THIS WAS A BREEDER LOT OR ABOUT 20 LBS WITH MUCH INERT MATERIAL. AND WATERGRASS. A SEQUENCE OF AIR SCREEN AND GRAVITY BROUGHT PURITY FROM AN ESTIMATED 50% TO APPROXIMATELY 99%.	
				ECHINOCHLOA	CRUSGALLI	WATERGRASS		GRAVITY	SEQ:LAH, CLOTH, LOW AIR	GOOD					
207	DACTYLIS	GLOMERATA	ORCHARDGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	INDENT DISC	R5 DISC, 30-40RPM	FAIR					NONE OF THE MACHINES ACCOMPLISHED THE DESIRED SEPARATION OF REMOVING AL
				AGROPYRON	REPENS	QUACKGRASS		INDENT CYLINDER	7/32"X.022"DEEP POCKETS	FAIR					
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY	#80 FINE SANDPAPER	POOR					
519	DACTYLIS	GLOMERATA	ORCHARDGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	INDENT DISC	M OR V-6 1/2 DISC	POOR					ALL METHODS GAVE UNSATISFACTORY RESULTS IN MAKING THIS SEPARATION. ONLY THE INDENT DISC WAS ABLE TO MAKE A SEPARATION, BUT WITH A 50% TO 70% CROP LOSS.
424	DACTYLIS	GLOMERATA	ORCHARDGRASS	ALLIUM	CANADENSE	WILD ONION	REMOVE WILD ONION BULBLETS.	SCREEN	SEQ.1/22 ROUND-HOLE	GOOD					THE ABOVE SEQUENCE SALVAGED 79% OF THE SEED FREE OF ONION. IF THE HELD FRACTION FROM THE FINAL 1/22 SCREENING WAS CONSIDERED CLEAN ENOUGH, TOTAL RECOVERY WOULD BE 90%.
				ALLIUM	CANADENSE	WILD ONION		PNEUMATIC	SEQ.REJECT FROM 1/22	GOOD					
				ALLIUM	CANADENSE	WILD ONION		OTHER	SEQ.HAND RUBBING, REJECT FROM PNEU.	GOOD					
				ALLIUM	CANADENSE	WILD ONION		PNEUMATIC	SEQ.	GOOD					
				ALLIUM	CANADENSE	WILD ONION		SCREEN	SEQ.1/22 ROUND-HOLE,CLEAN FRACT FROM PNEUM.	GOOD		100	100		
253	DACTYLIS	GLOMERATA	ORCHARDGRASS	INERT		INERT	REMOVE INERT MATERIAL (STERILE OR EMPTY FLORETS, FLORETS WITH STAMENS AND VELVETGRASS GLUMES), VELVET GRASS (7.3%) AND RATTAIL FESCUE (.19%).	SCREEN	SEQ1.1/21	FAIR	71			GOOD RESULTS OBTAINED WITH SEQUENCE 2 (VIBRATOR/PNEUMATIC), WITH VELVETGRASS BEING CARRIED UPHILL ON THE VIBRATOR AND RATTAIL FESCUE BEING DROPPED IN THE BLOWER. BEST PRACTICAL RESU	BEST PRACTICAL RESULTS WITH SEQUENCE 1 (SEE NOTES), USING 1/21, 1/20, 6X26, AND PNEUMATIC SEPARATOR. 58.5% OF LOT SALVAGED FREE OF CONTAMINANTS.
				HOLCUS	LANATUS	VELVETGRASS		SCREEN	SEQ1.1/20,FRACT HELD ON 1/21	FAIR					
				VULPIA	MYUROS	RATTAIL FESCUE		SCREEN	SEQ1.6X26,FRACT THRU 1/21	FAIR					

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				HOLCUS	LANATUS	VELVETGRASS		PNEUMATIC	SEQ1.FRACT THRU 6X26	FAIR		100	100		
				VULPIA	MYUROS	RATTAIL FESCUE		VIBRATORY	SEQ2.	GOOD					
				HOLCUS	LANATUS	RATTAIL FESCUE		PNEUMATIC	SEQ2.	GOOD					
174	DACTYLIS	GLOMERATA	POTOMAC ORCHARDGRASS	LOLIUM		RYEGRASS	REDUCE RYEGRASS TO MEET BLUE TAG REQUIREMENTS.	AIR-SCREEN	4X22 W/DAMS	GOOD	93	95	99		THE VIBRATOR REMOVED ABOUT 50% OF THE LOT CONTAINING ALL OR NEARLY ALL THE RYEGRASS. THE AIR-SCREEN MACHINE DID THE BEST, SALVAGING 53% OF THE LOT WITH .6% RYEGRASS.
				LOLIUM		RYEGRASS		VIBRATORY	CROCUS CLOTH DECK	GOOD					
				LOLIUM		RYEGRASS		PNEUMATIC		POOR					
				LOLIUM		RYEGRASS		GRAVITY		POOR					
260	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	SCREEN	SEQ.1/22 ROUND-HOLE	GOOD	98				Recommended procedure is to screen with 1/22 round hole with dams, debeard the held portion to break down crop doubles, and screen again with the 1/22 to recover more crop.
				LOLIUM		RYEGRASS		OTHER	SEQ.RUB HELD FRACT TO DEBEARD	GOOD					
				LOLIUM		RYEGRASS		SCREEN	SEQ.1/22, DEBEARDED FRACT.	GOOD			100		
261	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS FROM SAMPLE CONTAINING CROP SINGLES, CROP DOUBLES, AND CROP GROATS.	SCREEN	SEQ.1/19 ROUND HOLE						Most of the crop singles were recla
				LOLIUM		RYEGRASS		OTHER	SEQ.HELD FRACT DEBEARDED						
				LOLIUM		RYEGRASS		PNEUMATIC	SEQ.DEBEARDED FRACT BLOWN						
				LOLIUM		RYEGRASS		SCREEN	SEQ.1/25RH:DROPPED IN BLOWER						
				LOLIUM		RYEGRASS		SCREEN	SEQ.4X22, FRACT THROUGH 1/19						
263	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	SCREEN	1/23 ROUND HOLE	FAIR	81	100	100		78% of the crop could be salvaged with a 1/23 round hole screen as clean seed. Other trials were unsuccessful although the gravity table and the vibrator did show a tendency to concentrate the ryegrass.
				LOLIUM		RYEGRASS		VELVET ROLL		POOR					
				LOLIUM		RYEGRASS		PNEUMATIC		POOR					
				LOLIUM		RYEGRASS		VIBRATORY		POOR					
				LOLIUM		RYEGRASS		GRAVITY		POOR					
268	DACTYLIS	GLOMERATA	PENNLATE ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	SCREENS	SEQ.1/20 RH OVER 6X23 SLOT	FAIR					THE COMBINATION OF SCREENING AND PNEUMATIC SEPARATION RECOVERED ABOUT 30% OF THE ORIGINAL SAMPLE WHICH WAS A REASONABLY GOOD PERCENTAGE CONSIDERING THE AMOUNT OF TRASH AND RYEGRASS IN THE ORIGINAL LOT.
				LOLIUM		RYEGRASS		PNEUMATIC	SEQ.	FAIR					
				LOLIUM		RYEGRASS		SCREEN	SEQ..038"	FAIR					
269	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	SCREENS	1/23 RH OVER 6X25 SLOT	FAIR	37	100	100		BEST RESULTS WERE OBTAINED BY SCREENING WITH A 1/23 ROUND-HOLE OVER A 6X25 SLOT. 73% OF THE ORCHARDGRASS WAS RECOVERED. THE BOUNCE PLATE DID REASONABLY WELL, RECOVERING 57% OF THE ORCHARDGRASS. ORIGINAL PURITY WAS ONLY 37%.
				LOLIUM		RYEGRASS		OTHER	BOUNCE PLATE	FAIR	37	100	100		
333	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	VIBRATORY	SANDPAPER DECK	FAIR					THE VIBRATOR SALVAGED A LARGE FRACTION OF ORCHARDGRASS WITH A SMALL AMOUNT OF RYEGRASS.
				LOLIUM		RYEGRASS		SCREENS		POOR					
				LOLIUM		RYEGRASS		OTHER		POOR					
				LOLIUM		RYEGRASS		PNEUMATIC		POOR					
				LOLIUM		RYEGRASS		OTHER	HORIZONTAL SEED SHOOTER	POOR					
387	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS								MEASUREMENTS ONLY.
515	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS USING BOUNCE PLATE.	OTHER	BOUNCE PLATE, ONE PASS	GOOD	96	75	99		THE BOUNCE PLATE PERFORMED WELL ALTHOUGH RERUNNING THE CLEAN FRACTION WOULD REDUCE THE RYEGRASS FURTHER.
594	DACTYLIS	GLOMERATA	ABLE ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	PNEUMATIC		POOR					ALL THE MACHINES TRIED DID SOME CONCENTRATING, BUT NOT ENOUGH.
				LOLIUM		RYEGRASS		SCREENS		POOR					
				LOLIUM		RYEGRASS		OTHER	BOUNCE PLATE	POOR					
633	DACTYLIS	GLOMERATA	ORCHARDGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	PNEUMATIC		GOOD	3.4	94	100		BEST RESULTS WERE OBTAINED WITH PNEUMATIC SEPARATOR AND SCREEN. THE SCREEN IS PROBABLY PREFERABLE BECAUSE IT HOLDS A FRACTION OF CROP DOUBLES WHICH COULD BE FURTHER PROCESSED FOR ADDITIONAL YIELD.
								SCREEN	1/20 ROUND-HOLE	GOOD	3.4	94	100		
1140	DACTYLIS	GLOMERATA	ORCHARD GRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS, TALL FESCUE, ANNUAL BLUEGRASS, AND OTHERS	SCREENS	SEQ	FAIR				THIS WAS A BREEDER LOT THAT WAS CONTAMINANTED MOSTLY WITH RYEGRASS BUT ALSO CONTAINED SOME TALL FESCUE, ANNUAL BLUEGRASS, LESSER SNAPDRAGON AND OTHERS. OF MAIN CONCERN WAS THE RYEGRASS BECAUSE OF ITS SIMILARITY TO THE CROP.	
				LOLIUM		RYEGRASS		PNEUMATIC	SEQ	FAIR					

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				LOLIUM		RYEGRASS		GRAVITY	SEQ	FAIR					
				LOLIUM		RYEGRASS		VIBRATORY	SEQ	FAIR					
120	DACTYLIS	GLOMERATA	ORCHARDGRASS	RUMEX	ACETOSELLA	SHEEP SORREL	REDUCE CONCENTRATION OF RYEGRASS, SHEEP SORREL AND BUCKHORN PLANTAIN TO ACCEPTABLE LEVELS.	INDENT CYLINDER	SEQ.#5 CYLINDER	GOOD	80			VIBRATOR GAVE POOR RESULTS.	GOOD RESULTS WERE OBTAINED USING THE INDENT CYLINDER TO REMOVE SHEEP SORREL AND PLANTAIN (ALL SORREL REMOVED, 180 BUCKHORN/LB LEFT, ALL RYEGRASS LEFT, 7% SHRINKAGE) FOLLOWED BY SCREENING (A FEW RYEGRASS LEFT, 245 BUCKHORN/LB LEFT, 27% SHRINKAGE).
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		INDENT CYLINDER	SEQ.#5 CYLINDER	GOOD	80				
				LOLIUM		RYEGRASS		AIR-SCREEN	SEQ.1/18 W/4 DAMS, 440 RPM, 1/2" STROKE	GOOD	80				
1255	DACTYLIS	GLOMERATA	ORCHARDGRASS	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL FROM ORCHARDGRASS	INDENT CYLINDER	2.75MM POCKET	GOOD	15/LB	100		THIS WAS POTOMAC BREEDER SEED AND NEEDED ALL RUMEX REMOVED FOR CERTIFICATION. THE 2.75 MM INDENT CYLINDER REMOVED A LARGE PORTION OF THE RUMES WITH 2% LOSS. THE 3.75MM INDENT CYLIN	USE A 2.75MM INDENT CYLINDER TO REMOVE SHEEP SORREL FROM ORCHARDGRASS.
				RUMEX	ACETOSELLA	SHEEP SORREL		INDENT CYLINDER	3.75MM POCKET	FAIR	15/LB	100			
				ECHINOCHLOA	CRUSGALLI	BARNYARDGRASS		INDENT CYLINDER	3.75MM POCKET	GOOD					
121	DACTYLIS	GLOMERATA	ORCHARDGRASS	VULPIA	MYUROS	RATTAIL FESCUE	REDUCE WEED CONCENTRATIONS (RATTAIL FESCUE-1270/LB, CHESS-600/LB, PLANTAIN-400/LB, SHEEP SORREL-200/LB) TO ACCEPTABLE LEVELS.	AIR-SCREEN	SEQ.1/15 W/DAMS OVER 4X28	GOOD	99	80		The pneumatic separator was ineffective in this separation.	The air screen machine was able to remove mo
				BROMUS	SECALINUS	CHESS		AIR-SCREEN	SEQ.1/15 W/DAMS OVER 4X28	GOOD	99	100			
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		INDENT CYLINDER	SEQ.#5 CYLINDER, 15 RPM	GOOD	99	67			
				RUMEX	ACETOSELLA	SHEEP SORREL		INDENT CYLINDER	SEQ.#5 CYLINDER, 15 RPM	FAIR	99	25			
285	DACYLIS	GLOMERATA	PENNLATE ORCHARDGRASS	ALLIUM	CANADENSE	WILD ONION	REMOVE WILD ONION (100% REMOVAL NECESSARY).	SCREENS	SEQ.1/19 OVER 6X23	FAIR					SCREENING WITH A 1/19 OVER A 6X23 REMOVED MUCH
				ALLIUM	CANADENSE	WILD ONION		ELECTROSTATIC	SEQ.18KV,ROT=5.25,HOR=7,VER=9.75	FAIR		100	100		
				ALLIUM	CANADENSE	WILD ONION		PNEUMATIC		POOR					
				ALLIUM	CANADENSE	WILD ONION		VIBRATORY		POOR					
137	DAHLIA		DAHLIA	TRASH		TRASH	REMOVE TRASH	SCREENS	SEQ.1/16X1/2 OVER #7						THE SCREEN/INDENT CYLINDER EVIDENTLY YIELDED A SATISFACTORY SEPARATION.
				TRASH		TRASH		INDENT CYLINDER	SEQ.#20 CYLINDER						
104	DAHLIA		DAHLIA	ZINNIA		ZINNIA	REMOVE ZINNIA FROM DAHLIA SEED.	VIBRATORY	FINE SANDPAPER DECK	GOOD			95		THE VIBRATOR SEPARATOR SHOWED THE BEST RESULTS. IT YIELDED 4 FRACTIONS. THE LOWER FRACTION,54% OF THE SAMPLE, WAS 95% DAHLIA, THE SECOND FRACTIO
				ZINNIA		ZINNIA		PNEUMATIC		POOR					
				ZINNIA		ZINNIA		ELECTROSTATIC		POOR					
				ZINNIA		ZINNIA		INDENT DISC		POOR					
136	DAHLIA		DAHLIA				CLEAN SEED.								PROCESSED WITH SUBMITTER PRESENT. NO RECORD.
1123	DALHIA	PINNATA	DAHLIA	DAHLIA		FIELD RUN DALHIA	DETERMINE CLEANING SEQUENCE	SCREENS	SEQ 24/64 RH, 12/64 RH,1/13 RH	GOOD				THIS MATERIAL WAS HAND THRESHED BEFORE SCREENING. RESULTING CLEAN FRACTION WAS APPROXIMATELY 75% SEED. THIS WAS ACCEPTABLE FOR THIS SUBMITTER.	
				DAHLIA		FIELD RUN DALHIA		PNEUMATIC	SEQ ESM	GOOD					
1258	DANTHONIA	CALIFORNICA													
417	DAUCUS	CAROTA	CARROT	CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE	REMOVE YELLOW STARTHISTLE	SCREENS	1/17RH OVER 6X26 SLOT	FAIR		100	100		THE VIBRATOR DID THE BEST, REMOVING ALL STARTHISTLE WITH ONLY 5% LOSS OF CARROT.
				CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE		VIBRATORY		GOOD		100	100		
				CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE		PNEUMATIC		POOR					
				CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE		OTHER	BOUNCE PLATE	POOR					
				CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE		ELECTROSTATIC		POOR					
				CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE		VELVET ROLL		POOR					
666	DAUCUS	CAROTA	CARROT	CHENOPODIUM	ALBUM	LAMBSQUARTERS	REMOVE LAMBSQUARTERS	FRICTION		GOOD					THE FRICTION SEPARATOR PERFORMED WELL IN THIS PROBLEM. EACH FRACTION FROM THE FIRST RUN WAS RERUN TO SALVAGE MORE SEED.
772	DAUCUS	CAROTA	CARROT	CIRSIUM	ARVENSE	CANADA THISTLE	REMOVE CANADA THISTLE	VIBRATORY		GOOD		90		ROUND HOLE SCREENS SHOWED SOME PROMISE IN MAKING THE SEPARATION. THE FRICTION SEPARATOR REMOVED SOME CONTAMINANT, BUT WITH HIGH CROP LOSS.	THE VIBRATOR PROVIDES THE BEST SEPARATION. FEED RATE MUST BE KEPT VERY LOW.
90	DAUCUS	CAROTA	CARROT	CUSCUTA		DODDER	REMOVE DODDER, BARNYARD GRASS, GREEN FOXTAIL AND LAMBSQUARTER.	VIBRATORY	FINE SANDPAPER DECK	GOOD				THE FIRST DRAPER TRIAL REMOVED THE FOLLOWING: CARROT-82%, DODDER-100%,	THE FIRST DRAPER TRIAL WITH SMOOTH PLASTIC BELT
				CHENOPODIUM	ALBUM	LAMBSQUARTER		DRAPER	38 FPM, 26 DEG, SMOOTH PLASTIC	GOOD					

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				ECHINOCHLOA	CRUSGALLI	BARNYARD GRASS		DRAPER	38 FPM, 23 DEG, CANVAS BELT	GOOD					
				SETARIA	VIRIDIS	GREEN FOXTAIL		VELVET ROLL		POOR					
								PNEUMATIC		POOR					
355	DAUCUS	CAROTA	CARROT	CUSCUTA		DODDER	REMOVE DODDER, BARNYARDGRASS AND NIGHTSHADE	SCREEN	SEQ.6X20 SLOT	GOOD					THE 6X20 SCREEN/VIBRATOR SEQUENCE MADE A VERY GOOD SEPARATION. THE 6X20 SCREEN HELD 1% OF THE LOT WITH 91% OF THE DODDER.
				ECHINOCHLOA	CRUSGALII	BARNYARDGRASS		SCREEN	SEQ.6X20 SLOT	FAIR					
				ECHINOCHLOA	CRUSGALII	BARNYARDGRASS		VIBRATORY	SEQ.SANDPAPER DECK	GOOD					
				SOLANUM		NIGHTSHADE		VIBRATORY	SEQ.SANDPAPER DECK	GOOD					
383	DAUCUS	CAROTA	CARROT	CUSCUTA		DODDER	REMOVE DODDER	INDENT CYLINDER	SEQ1..0625"DIAX.0184 "DEEP POCKETS	GOOD				THE SAMPLE WAS FIRST RUN ON THE INDENT WHICH REMOVED MOST OF THE DODDER, BROKEN CARROT AND SOME SHORT CARROT. THE CLEAN FRACTION WAS DIVIDED AND PART WAS RUN ON THE VIBRATOR AND PART WAS RUN OVER THE BOUNCE PLATE.	BOTH THE INDENT/VIBRATOR SEQUENCE AND INDENT/BOUNCE PLATE SEQUENCE MATERIALLY IMPROVED THE PURITY OF THE SEED.
				CUSCUTA		DODDER		VIBRATORY	SEQ1.SANDPAPER DECK	GOOD					
				CUSCUTA		DODDER		INDENT CYLINDER	SEQ2..0625"DIAX.0184 "DEEP POCKETS	GOOD					
				CUSCUTA		DODDER		OTHER	SEQ2.BOUNCE PLATE	GOOD					
681	DAUCUS	CAROTA	CARROT	CUSCUTA		DODDER	REMOVE DODDER	MAGNETIC		POOR				SEPARATING TRIALS WERE DONE WITH A SYNTHETIC TEST MIXTURE BECAUSE NO SAMPLE WAS SUBMITTED.	WITH SEVERAL PASSES, THE SPIRAL WAS ABLE TO REMOVE MOST OF THE DODDER WITH LITTLE CROP LOSS.
				CUSCUTA		DODDER		SPIRAL		FAIR		66			
1014	DAUCUS	CAROTA	CARROT	CUSCUTA		DODDER	REMOVE DODDER FROM CARROT.	INDENT CYLINDER	2.0MM	POOR	0	50			Dodder can be removed from carrot by utilizing the dodder's roundness vs the flatness of carrot. The round seeds roll and the flat seeds do not.
				CUSCUTA		DODDER		FRICTION	13DG SIDE, 9DG BACK	GOOD		100	100		
				CUSCUTA		DODDER		DRAPER	SUEDE BLT, 23DG,43FT/MIN	GOOD		100	100		
				CUSCUTA		DODDER		DRAPER	SUEDE BLT, 25DG,52FT/MIN	FAIR		91			
				CUSCUTA		DODDER		VIBRATORY	SMALL DECK, AIR .2, 3D SIDE, 3DG BACK	POOR		83			
				CUSCUTA		DODDER		VIBRATORY	WOOD DECK, 3DG SIDE,3D BACK, 500 RPM	GOOD		100			
				CUSCUTA		DODDER		DRAPER	SMOOTH BELT, 40FPS, 23DG	BEST		100			
				CUSCUTA		DODDER		ELECTROSTATIC	PINNING POSITION	POOR					
479	DAUCUS	CAROTA	CARROT	DAUCUS	CAROTA	CARROT	REMOVE LOW GERMINATION SEED	ELECTROSTATIC		GOOD					SEPARATION TRIALS FAILED TO GRADE THESE LOTS ACCORDING TO QUALITY.
				DAUCUS	CAROTA	CARROT		COLOR SORTER		POOR					
744	DAUCUS	CAROTA	HYBRID CARROT	DAUCUS	CAROTA	CARROT	REMOVE LOW GERMINATION SEEDS	POOR	BATCH UNIT	GOOD					
				DAUCUS	CAROTA	CARROT		PNEUMATIC	CONTINUOUS FLOW	GOOD					
760	DAUCUS	CAROTA	CARROT	DAUCUS	CAROTA	LOW-GER. CARROT SEED	REMOVE LOW-GERMINATION SEED	GOOD							THE CARROT COULD NOT BE SIGNIFICANTLY IMPROVED BY USE OF A PNEUMATIC SEPARATOR.
1006	DAUCUS	CAROTA	CARROT	DAUCUS	CAROTA	LOW GERM CARROT	IMPROVE GERMINATION	INDENT CYLINDER						THIS MATERIAL WAS DIVIDED FIRST WITH THE INDENT CYLINDER AND THEN WITH THE SCREEN	INCONCLUSIVE
				DAUCUS	CAROTA	LOW GERM CARROT		SCREEN							
1010	DAUCUS	CAROTA	CARROT	DAUCUS	CAROTA	LOW GERM CARROT	TEST ELECTROSTATIC SEPARATOR TO IMPROVE GERMINATION	ELECTROSTATIC							
1020	DAUCUS	CAROTA	CARROT	DAUCUS	CAROTA	LOW GERM CARROT	IMPROVE GERMINATION	ELECTROSTATIC	PINNING	FAIR	55		65	2 KG OF THREE SIZE CLASSES OF HYBRID PAK MOR. SUBMITTER CAN HANDLE THE GERM TESTS (144) IF THE SAMPLES ARE SENT A FEW AT A TIME. 7/14/88	THIS WAS THE SEED USED FOR A RESEARCH PRO
1113	DAUCUS	CAROTA	CAROT	DAUCUS	CARROTA	CARROT	REMOVE LOW GERM CARROT	ELECTROSTATIC						TWO VARITIES OF CARROT WERE SENT FOR ELECTROSTATIC SEPARATION TESTS. PRECONDITIONING TESTS ARE INDICATED THAT WILL VARY THE MOISTURE CONTENT OF THE SEEDS PRIOR TO SEPARATION.	
328	DAUCUS	CAROTA	CARROT	DIGITARIA		CRABGRASS	REMOVE CRABGRASS.	VIBRATORY							NO RESULTS REPORTED.
286	DAUCUS	CAROTA	CARROT	ECHINOCHLOA	CRUSGALLI	BARNYARDGRASS	REMOVE BARNYARDGRASS	SCREEN	6X23	FAIR					A 6X23 SCREEN YIELDED 83% OF THE LOT WITH ONLY A FEW BARNYARDGRASS. THE VIBRATOR DID THE BEST YIELDING EITHER 74% WITH NO BARNYARDGRASS OR 94% WITH JUST A FEW BARNYARDGRASS.
				ECHINOCHLOA	CRUSGALLI	BARNYARDGRASS		VIBRATORY	FINE TEXTURED DECK	GOOD					
302	DAUCUS	CAROTA	CARROT	ECHINOCHLOA	CRUSGALLI	BARNYARDGRASS	REMOVE BARNYARDGRASS, NIGHTSHADE AND CRABGRASS	VIBRATORY	80 GRIT SANDPAPER DECK	GOOD				THE PNEUMATIC AND ELECTROSTATIC SEPARATORS WERE UNSUCCESSFUL.	THE VIBRATOR SEPARATOR DID THE BEST, Y
				SOLANUM		NIGHTSHADE		VIBRATORY	80 GRIT SANDPAPER DECK	GOOD					
				DIGITARIA		CRABGRASS		VIBRATORY	80 GRIT SANDPAPER DECK						

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
1068	DAUCUS	CAROTA	CARROT	ECHINOCHLOA	CRUSGALLI	WATERGRASS	REMOVE WATERGRASS	GRAVITY	BLOCK-OFF DECK, 180 GRIT	GOOD		90		RUN AT 600 VIBRATIONS PER MIN. AND HIGH END SLOPE.	USE GRAVITY TABLE WITH BLOCK-OFF DECK TO REMOVE WATERGRASS.
1139	DAUCUS	CAROTA	CARROT	INERT			REMOVE INERT MATERIAL; DO GENERAL CLEANING	SCREENS	SEQ.#6RH, #6 1/2RH, 1/13RH, 6X25WW, 1/16X1/4SLOT					THIS MATERIAL WAS THE DISCARD FROM A PREVIOUSLY CLEANED LOT INCLUDING 4 BAGS EACH OF TWO VARITIES. THE BAGS CONTAINED RUN-OFF FROM TOP SCREEN, GRAVITY TABLE LIGHT AND HEAVY FRACTIONS, AND AIR-LIFTED MATERIAL.	SCREENING AND BLOWING CAN SALVAGE SEED FROM MILL AIR-LIGHT AND GRAVITY TABLE-LIGHT DISCARD FRACTIONS. SALVAGING SEED FROM TOP SCREEN RUN-OFF WAS NOT AS EASY (PURITY OF ONLY 88% ACHIEVED) DUE TO OVERLAP OF SIZE AND SHAPE OF CROP AND C
				POLYGONUM	PERSICARIA	LADYSTHUMB		PNEUMATIC	SEQ.						
1038	DAUCUS	CAROTA	CARROT	MEDICAGO	LUPULINA	GOOD	REMOVE BLACK MEDIC	VIBRATORY		POOR		80-90		BLACK MEDIC CAN BE REMOVED FROM HULL BY VIGOROUS RUBBING, THEN EASILY REMOVED FROM CARROT BY AIR SCREEN MACH., BUT AFFECT OF RUBBING ON CARROT GERMINATION RATE UNKNOWN. THIS REPORT FORMERLY UNDER SAMPLE #736.	BLACK MEDIC MAY BE REMOVED FROM CARROT SEED BY VIBRATOR, BUT CROP LOSS IS HIGH.
514	DAUCUS	CAROTA	CARROT	PASPALUM	DILATUM	WATERGRASS	REMOVE WATERGRASS AND OTHER ASSORTED WEEDS.	VIBRATORY	180 GRIT	GOOD	94	97	99		THE VIBRATOR YIELDED VERY GOOD RESULTS. OTHER TRIALS WERE UNSUCCESSFUL.
								PNEUMATIC		POOR					
								ELECTROSTATIC		POOR					
								OTHER	BOUNCE PLATE	POOR					
517	DAUCUS	CAROTA	CARROT	PASPALUM	DILATUM	WATERGRASS	REMOVE WATERGRASS AND OTHER CONTAMINANTS	VIBRATORY	SEQ.	GOOD	80	85	97	RERUNNING THE REJECT FRACTION FROM THE FIRST PASS WAS NOT HELPFUL IN IMPROVING THE QUALITY OF THE CROP YIELD.	ONE PASS ON THE VIBRATOR INCREASED THE PURITY FROM 80% TO 97% WITH A LOSS OF 27%. THE VALUE OF THE SECOND PASS IS QUESTIONABLE, BECAUSE THE PURITY IS NOT IMPROVED MUCH WHILE ANOTHER 9% OF THE CARROT IS LOST.
				MISC		MISC		VIBRATORY	SEQ.	FAIR	97	70	98		
537	DAUCUS	CAROTA	CARROT	PASPALUM	DILATUM	WATERGRASS	REMOVE WATERGRASS	VIBRATORY	180 GRIT DECK	GOOD		100			THE VIBRATOR SEPARATOR DID A VERY GOOD JOB OF THIS SEPARATION. 94% OF THE CARROT WAS SALVAGED AND WATERGRASS WAS REDUCED FROM 4400 PER POUND TO 7 PER POUND.
585	DAUCUS	CAROTA	CARROT	PASPALUM	DILATATUM	WATERGRASS	REMOVE WATERGRASS	VIBRATORY	180 GRIT	GOOD					THE VIBRATOR SEPARATOR WITH 180 GRIT SANDPAPER DID A VERY GOOD JOB OF REMOVING WATERGRASS FROM CARROT.
								FRICTION		POOR					
636	DAUCUS	CAROTA	CARROT	PASPALUM	DILATATUM	WATERGRASS	REMOVE WATERGRASS	FRICTION		FAIR					THE VIBRATOR SEPARATOR MADE AN ALMOST COMPLETE SEPARATION AT A GOOD FLOW RATE. A 6X20 SCREEN YIELDED A 99.96% PURE SAMPLE WITH 96% OF THE WATERGRASS REMOVED.
								VIBRATORY		GOOD					
303	DAUCUS	CAROTA	CARROT	SETARIA	VIRIDIS	GREEN BRISTLEGRASS	REMOVE GREEN BRISTLEGRASS, NIGHTSHADE AND CRABGRASS.	SCREEN	6X20 WIRE SLOT	GOOD		96	100	THE PNEUMATIC AND ELECTROSTATIC SEPARATORS WERE INEFFECTIVE. THE VIBRATOR RECOVERED 80% OF THE LOT WITH LITTLE CONTAMINANT. THE FRACTION NEXT TO THE CLEAN FRACTION ON THE V	THE VIBRATOR SALVAGED 80% OF THE CROP WITH LOW WEED COUNT. THE FIRST REJECT FRACTION WAS SCREENED TO RECOVER MORE CROP. THE FINAL PRODUCT CONTAINED ONLY A TRACE OF CONTAMINANT.
				SOLANUM		NIGHTSHADE		SCREEN	SEQ.1/20, 3RD FRACT FROM VIBRATOR						
				DIGITARIA		CRABGRASS		SCREENS	SEQ.6X26 OVER 1/23,THRU 1/20 FRACT						
								SCREENS	SEQ.18X18OVER6X26,OVER 1/20 FRACT						
390	DAUCUS	CAROTA	CARROT	SOLANUM		NIGHTSHADE	REMOVE NIGHTSHADE.	INDENT CYLINDER	.116"DIA X .037"DEEP POCKET	FAIR		96		SEED DIMENSIONS OVERLAPPED CREATING GREAT DIFFICULTY IN MAKING THIS SEPARATION.	SUCCESS WAS LIMITED WITH THIS SAMPLE. BEST RESULTS WERE WITH THE .116"DIA X .037"DEEP INDENT CYLINDER WHICH YIELDED 73% OF THE CARROT WITH 96% OF THE NIGHTSHADE REMOVED.
				SOLANUM		NIGHTSHADE		VIBRATORY		POOR					
672	DAUCUS	CAROTA	CARROT	SOLANUM		NIGHTSHADE	REMOVE NIGHTSHADE	FRICTION		POOR					A 6X25 HAND SCREEN WAS EFFECTIVE IN REMOVING THE NIGHTSHADE FROM CARROT SEED.
				SOLANUM		NIGHTSHADE		SCREEN	6X25	GOOD		100	100		
992	DAUCUS	CAROTA	CARROT	SOLANUM		NIGHTSHADE	REMOVE SOLANUM COMPLETELY. LOWER PERCENTAGE OF ECHINOCHOLA. REDUCEÿTHE QUANTITY OF INERT TO COMPRISE<0.5% BY WT. TWO LOTS OF CARROT.	SCREENS	#6 -> 1/14 RH						THIS MATERIAL CAN BE EFFECTIVELY CONDITIONED USING ROUND HOLEÿSCREENS TO REMOVE THE WATERGRASS AND A PORTION OF THE INERTÿMATERIAL. THE NIGHTSHADE PASSED THROUGH THE 6X24 WOVEN WIREÿSCREEN AND A MAJORITY OF THE INERT MATERIAL WAS HELD ON THEÿ6X18 WOVEN
				ECHINOCOLA	CRUSGALLI	BARNYARDGRASS		SCREENS	6X18 -> 6X24 WW						
				INERT		INERT		INDENT CYLINDER	2.5MM POCKET						
498	DAUCUS	CAROTA	CARROT	STICKS		STICKS	REMOVE STICKS AND ONION SEED.	SCREEN	SEQ.1.1/20X1/2	GOOD					N
								INDENT CYLINDER	SEQ.1.#10 CYLINDER	GOOD					
								PNEUMATIC	SEQ.2.	GOOD					
								INDENT CYLINDER	SEQ.2.#10 CYLINDER	GOOD					
				ALLIUM	CEPA	ONION		COLOR SORTER	SEQ.2.	GOOD					

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187	DAUCUS	CAROTA	CARROT	THLASPI	ARVENSE	PENNYCRESS(FRENCH WEED)	REMOVE FRENCH WEED ON VIBRATOR SEPARATOR.	VIBRATORY	FINE SANDPAPER DECK	GOOD					ONE PASS ON THE VIBRATOR RECOVERED 73% OF THE CARROT FREE OF FRENCH WEED OR 80% WITH A FEW FRENCH WEED. RERUNNING THE REJECT FRACTION YIELDED 90% OF THE CARROT FREE OF FRENCH WEED.
				THLASPI	ARVENSE	PENNYCRESS		VIBRATORY	RERUN REJECT FRACTION, FINE SANDPAPER	GOOD					
559	DAUCUS	CAROTA	CARROT	WEED		WEED	REMOVE WEED SEED.	INDENT CYLINDER	SEQ. #6 CYLINDER					SCREENS, CHUTE AND RESILIENCE SEPARATORS WERE INEFFECTIVE.	THE INDENT CYLINDER FOLLOWED BY VIBRATOR SEPARATOR PERFORMED VERY WELL.
				WEED		WEED		VIBRATORY	SEQ.	GOOD		99			
430	DAUCUS	CAROTA	CARROT												
647	DAUCUS	CAROTA	CARROT				REMOVE CONTAMINANT	BELT THRESHER	SEQ.						THE ABOVE SEQUENCE YIELDED A 99.7% PURE SAMPLE WITH CROP LOSS.
988	DAUCUS	CAROTA	CARROT					SCREEN	SEQ.						
1210	DAUCUS	CAROTA	CARROT				SIZE SEED WITH CYLINDRICAL AND FLAT SCREENS AND COMPARE RESULTS.	PNEUMATIC	SEQ.					TWO VARIETIES OF CARROT SEED WERE SIZED WITH 5.5, 5.0, 4.5, 4.0, AND 3.5 ROUND HOLE CYL	
1211	DAUCUS	CAROTA	CARROT				CLEAN AND UPGRADE GERMINATION	SCREEN	SEQ.				100		
613	DAUCUS	CAROTUS	CARROT	CUSCUTA		DODDER	REMOVE DODDER (REPORTEDLY 40/LB) AND CANADA THISTLE (REPORTEDLY 20/LB).	FRICTION		POOR				ONLY 2 DODDER/LB AND NO THISTLE WERE FOUND IN THE SAMPLE ALTHOUGH THE REPORTED AMOUNTS WERE MUCH HIGHER. SO, SYNTHETIC MIXTURES WERE MADE UP FOR THESE TRIALS.	THE FRICTION SEPARATOR WAS INEFFECTIVE AT REMOVING DODDER, BUT DID REMOVE 90% OF THE THISTLE WITH 10% CROP LOSS.
				CIRSIUM	ARVENSE	CANADA THISTLE		FRICTION		GOOD		90			
853	DELPHINIUM		LARKSPUR	MALVA		MALLOW	REMOVE MALVA SEED	PNEUMATIC		FAIR				SCREEN, VIBRATOR, MAGNETIC, PNEUMATIC AND GRAVITY SEPARATORS WERE TRIED, BUT ONLY THE PNEUMATIC SEPARATOR GAVE SATISFACTORY RESULTS.	MALVA SEED MAY BE PARTIALLY REMOVED FROM THE DELPHINIUM SEED USING PNEUMATIC SEPARATION, BUT COMPLETE REMOVAL REQUIRES A HIGH CROP LOSS.
133	DELPHINIUM		LARKSPUR				CLEAN SEED								PROCESSED WITH SUBMITTER PRESENT. NO RECORD.
685	DESCHAMPSIA	BERINGENSIS	BERING HAIRGRASS	INERT		INERT	REMOVE INERT MATERIAL: STRAW.	AIR-SCREEN	1/12 OVER 1/13 OVER 1/14 OVER 1/15 ROUND HOLE	GOOD			100	VIBRATOR, VELVET ROLLS, FRICTION, INCLINED DRAPER, INDENT CYLINDER AND PNEUMATIC SEPARATOR WERE UNSATISFACTORY.	EXCELLENT RESULTS WERE OBTAINED ON THE AIR-SCREEN WITH A 1/12 OVER A 1/13 OVER A 1/14 OVER A 1/15 ROUND HOLE SCREEN AND WITH NO AIR. 99.6% PURITY WAS OBTAINED WITH LESS THAN 1% LOSS.
1013	DESCHAMPSIA	CAESPITOSA	TUFTED HAIR GRASS	DESCHAMPSIA	CAESPITOSA	TUFTED HAIR GRASS	DEBEARD	SCARIFIER	#26 WW MANTLE TWO RUNS	GOOD					LAH HULLER SCARIFIER WORKED WELL BUT CAUSED SOME GROATING. TWO RUNS WERE NECESSARY TO COMPLETE THE WORK.
1084	DESCHAMPSIA	CAESPITOSA	TUFTED HAIRGRASS	LOLIUM		RYEGRASS	REMOVE LONG CONTAMINANTS	INDENT CYLINDER	3.5 MM POCKET	GOOD				THIS WAS A 100 LB LOT FOR INCREASE.	USE A 3.5 MM INDENT CYLINDER TO REMOVE LONG CONTAMINANTS
				VULPIA	MYUROS	RATTAIL FESCUE		INDENT CYLINDER	3.5 MM POCKET	GOOD					
195	DIANTHUS	CARYOPHILUS	CARNATION	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC	SEQ.	FAIR					NONE OF THE LAB MACHINES PERFORMED SATISFACTORILY, PARTLY BECAUSE INERT MATERIAL AND SEED DIMENSIONS OVERLAPPED. THE BEST THAT COULD BE DONE WAS WITH THE PNEUMATIC/INDENT CYLINDER SEQUENCE WHICH WAS STILL NOT VERY SATISFACTORY.
				INERT		INERT		INDENT CYLINDER	SEQ.#8 CYL.HEAVY FRACT FROM PNEUMATIC	FAIR					
139	DIANTHUS	CARYOPHYLLUS	CARNATION	TRASH		TRASH	REMOVE TRASH	PNEUMATIC		FAIR					SOME TRASH WAS LIFTED BY PNEUMATIC SEPARATOR. OTHERWISE, THERE WAS NO SUCCESS.
				TRASH		TRASH		VIBRATORY		POOR					
				TRASH		TRASH		ELECTROSTATIC		POOR					
990	DIGITALIS		TRASH	PLANTAGO	RUGELII	BLACKSEEDED PLANTAIN	REMOVE PLANTAGO COMPLETELY. REDUCE OTHER WEEDS AS COMPLETELYÿAS POSSIBLE.	INDENT CYLINDER	1MM POCKET						COMBINING THE INDENT WITH SCREENING APPEARED TO REDUCE THEÿQUANTITY OF PLANTAGO TO ABOUT 10% OF ITS ORIGINAL LEVEL. OTHERÿWEED
				SONCHUS		SPINY SOWTHISTLE		SCREEN	0.023 0.027 ROUND HOLE						
				VERONICA		SPEEDWELL									
				SISYMBRIUM	ALBUM	HEDGE MUSTARD									
765	DIMORPHOTHECA	AURANTIACA	STICK SEED	INERT		INERT	REMOVE INERT MATTER INCLUDING STICKS	SCREEN	SEQ. #5 1/2 ROUND HOLE		25	68	50	FRICTION, ELECTROSTATIC, INCLINED DRAPER, MAGNETIC, AND INDENT CYLINDER SEPARATORS WERE NOT EFFICTIVE. THIS SAMPLE FORMERLY #768B. SEE #768 (FORMERLY #768A) FOR RELATED PROBLEM.	A SEQUENCE OF HAND-SCREENING, PNEUMATIC SEPARATION AND VIBRATOR SEPARATION WORKED WELL IN SEPARATING STICK SEED FROM STICKS AND OTHER INERT MATERIAL.
				INERT		INERT		PNEUMATIC	SEQ. BATCH-TYPE			28			
				INERT		INERT		VIBRATORY	SEQ.	GOOD					
768	DIMORPHOTHICA	AURANTIACA		STEMS		STEMS	REMOVE STEMS	PNEUMATIC	BATCH-TYPE	GOOD				THIS PROBLEM SAMPLE FORMERLY #768A. SEE #765 FOR ASSOCIATED PROBLEM SAMPLE (FORMERLY #768B).	PRECISION GRADER (#8 OR #9) WORKED VERY WELL. HAND SCREENS (#8 ROUND HOLE AND 1/20X12 SLOTTED HOLE) WORKED WELL. THE BATCH-TYPE PNEUMATIC SEP WORKED BETTER THAN THE CONTINUOUS TYPE.
				STEMS		STEMS		SCREENS	#8 ROUND/1/20X1/2 SLOTTED	GOOD					

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				STEMS		STEMS		OTHER	PRECISION GRADER(#8 OR #9)	GOOD					
1232	DRYAS	DRUMONDII	YELLOW DRYAS	DRYAS	DRUMONDII	UNTHRESHED YELLOW DRYAS	DEBEARD AND CLEAN	SCARIFIER	SEQ. LAH W/26X26 WW MANTLE	GOOD				THIS MATERIAL WAS REPRESENTED VERY LITTLE SEED PROBABLY ONLY %5 BY WEIGHT. DEBEARDING WITH THE LAH REMOVED THE L	
				DRYAS	DRUMMONII	UNTHRESHED YELLOW DRYAS		SCREENS	VARIOUS SCREENS FROM 13/64 RH TO 32X32 WW	GOOD					
				DRYAS	DRUMMOMII	UNTHRESHED YELLOW		PNEUMATIC	ESM AT A LOW SETTING	GOOD					
892	ECHINACEA	PURPUREA	PURPLE CONEFLOWER	INERT		INERT	CONDITION SEED.	AIR-SCREEN	#9 RD OVER 1/20X1/2 PERF	GOOD					THE AIR-SCREEN MACHINE DID A GOOD JOB OF CLEANING THIS ALREADY THRESHED CONEFLOWER SEED.
827	ECHSCHOLTZIA	CALIFORNICA	CALIFORNIA POPPY	CIRSIUM	VULGARE	BULL THISTLE	REMOVE SOIL, BULL THISTLE	SCREEN	SEQ. 6X19 WOVEN WIRE	GOOD					6X19, 6X20, AND 4X20 WOVEN WIRE SCREENS WERE EQUALLY EFFECTIVE IN REMOVING THE BULL THISTLE WITH MINIMAL CROP LOSS. THE SOIL PARTICLES WERE BEST REMOVED BY MAGNETIC SEPARATION WITH VERY LITTLE CROP LOSS.
				INERT		INERT		MAGNETIC	SEQ. 4 ML MAG. FLUID/50G SEED	GOOD					
706	ELEOCHARIS		DWARF SPIKERUSH	INERT		INERT	REMOVE INERT MATERIAL (DIRT, CHAFF).	VIBRATORY		POOR				SEE PROBLEM SAMPLE #1065 (FORMERLY WITH THIS SAMPLE) FOR SIMILAR PROBLEM WITH SLENDER SPIKERUSH.	DUE TO SMALL SAMPLE SIZE, FEW MACHINES COULD BE TESTED, BUT THE FRICTION SEPARATOR DID A VERY GOOD JOB YIELDING AN ALMOST 100% PURE SAMPLE.
				INERT		INERT		FRICTION	VINYL BAR, SUEDE BELT	GOOD		100	100		
707	ELEOCHARIS		DWARF SPIKERUSH	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC		FAIR	25	66	50	THE SAMPLE HAD BEEN THRESHED, THEN CLEANED ON A CLIPPER, BUT WAS 3/4 INERT MATERIAL. THE VELVET ROLL, VIBRATOR, BOUNCE, GRAVITY TABLE, WATER SOAKING, AND ELECTROSTATIC SEPARATOR MADE NO OR LITTLE SEPARATION.	SCREENING WITH A 38X38 WIRE SCREEN, 6X42 WIRE SCREEN OR 26X26 WIRE SCREEN REDUC
				INERT		INERT		FRICTION	SUEDE BELT, VINYL BAR	GOOD					
				INERT		INERT		SCREEN	38X38 WIRE	FAIR	25	66	50		
1065	ELEOCHARIS		SLENDER SPIKERUSH	INERT		INERT	REMOVE INERT MATERIAL(DIRT AND CHAFF)	SCREENS	.024, .027 RD HOLE, 6X50 SLOT	FAIR				THIS PROBLEM SAMPLE FORMERLY PART OF #706. SEE #706 FOR SAME PROBLEM WITH DWARF SPIKEGRASS.	DUE TO SMALL SAMPLE SIZE, FURTHER TESTING WAS NOT POSSIBLE. HOWEVER, SLENDER SPIKEGRASS MAY BE CLEANED SOMEWHAT WITH SCREENS OR THE PNEUMATIC SEPARATOR AT LOW AIR VELOCITY.
				INERT		INERT		PNEUMATIC		FAIR					
				INERT		INERT		FRICTION		POOR					
				INERT		INERT		VIBRATORY		POOR					
708	ELEOCHARIS		SPIKERUSH	MISC		MISC	REMOVE ROOTS, RHIZOMES, GRAVEL, ETC. FROM SPIKERUSH TUBERS.	SCREEN	SEQ.1/16X1/4 METAL SLOT	GOOD					SCREENING FOLLOWED BY PNEUMATIC SEPARATION YIELDS AND ACCEPTABLE PRODUCT.
				INERT		INERT		SCREEN	SEQ.6X24 WIRE SLOT	GOOD					
						STONES		PNEUMATIC		GOOD					
1197	ELYMUS	CINEREUS	STONES	ELYMUS	CINERYUS	UNTHRESHED BASIN WILDRYE	THRESH AND SEPARATE HAND COLLECTION								
1003	ELYMUS	GLAUCUS	BLUE WILDRYE	ELYMUS	GLAUCUS	BLUE WILDRYE	DEBEARD	SCARIFIER	8-12 SQUARE WIRE	GOOD					
1263	ELYMUS	GLAUCUS	BLUE WILDRYE												
190	ELYMUS	JUNCEUS	RUSSIAN WILDRYE	BROMUS	TECTORUM	DOWNY BROME	REMOVE DOWNY BROME	SCREEN	4X20 WIRE-MESH	POOR				THE USE OF SCREEN DAMS WOULD HELP MAKE A MORE EFFECIENT SEPARATION.	B
844	EREMOCARPUS		MULLEIN	N/A		N/A	DETERMINE PROCESSING SEQUENCE FOR EXTRACTING AND CLEANING MULLEIN SEED.	BELT THRESHER	SEQ.ZERO CLEARANCE	GOOD				SAMPLE WAS DRIED BEFORE THRESHING. THE FRACTION CONTAINING SEEDS AND SEED-SIZED PIECES OF STEMS AND LEAVES FROM THE AIR-SCREEN MACHINE WAS PUT THROUGH THE PNEUMATIC SEPARATOR.	A NEARLY PURE SEED SAMPLE OF EREMOCARPUS SEED CAN BE OBTAINED BY DRYING THE SAMPLE AND THEN FOLLOWING THE ABOVE SEQUENCE OF THRESHING, AIR-SCREENING AND PNEUMATIC SEPARATION.
								AIR-SCREEN	SEQ.#18 RD. HOLE TOP, 1/14 RD HOLE BOTTOM	GOOD					
								PNEUMATIC	SEQ.	GOOD					
431	EUCALYPTUS	DELEGATENSIS	EUCALYPTUS	CHAFF		CHAFF	REMOVE CHAFF	ELECTROSTATIC							SAMPLES SENT TO SUBMITTER FOR EVALUATION.
414	EUCALYPTUS		EUCALYPTUS	CHAFF		CHAFF	SEPARATE SEED FROM CHAFF.	ELECTROSTATIC							BECAUSE OF THE DIFFICULTY IN DETERMINING SEED FROM CHAFF, RESULTS WERE NOT EVALUATED.
				CHAFF		CHAFF		SCREENS							
				CHAFF		CHAFF		PNEUMATIC							
1072	EUCALYPTUS		EUCALYPTUS	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC		GOOD				THIS SAMPLE FORMERLY PART OF PROBLEM SAMPLE #710.	THE FRICTION AND AIR SEPARATORS DID A GOOD JOB OF REMOVING INERT MATERIAL.
				INERT		INERT		PNEUMATIC		GOOD					
539	EUCALYPTUS		EUCALYPTUS	MISC		FRICTION	REMOVE CHAFF, SEED CAPSULE FRAGMENTS AND INERT MATERIAL.	ELECTROSTATIC	SEQ. 1,2 PASSES	GOOD	5			MAGNETIC SEPARATOR AND BOUNCE PLATE WERE INEFFECTIVE.	THE FIRST SEQUENCE ABOVE YIELDED THE BEST RESULTS. THE LARGE QUANTITY OF CHAFF (95%) MADE SEPARATION AND ANALYSIS VERY DIFFICULT.
				MISC		MISC		PNEUMATIC	SEQ. 1, 310 FPM	GOOD			90		
				MISC		MISC		ELECTROSTATIC	SEQ. 2	FAIR	5				
				MISC		MISC		PNEUMATIC	SEQ. 2, 310 FPM	FAIR					
				MISC		MISC		SCREENS	SEQ. 2, .033 AND .038 RD	FAIR			93		

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1063	EUPATORIUM	PERFORATUM	COMMON BONESET												
546	FAGOPYRON	ESCULENTUM	BUCKWHEAT	HULLS		HULLS	REMOVE HULLS FROM KERNELS.	OTHER	SEQ.WATER SOAK FOR 5 MIN.						GOOD RESULTS WERE OBTAINED WITH THE ABOVE SEQUENCE. 80% OF THE AVAILABLE KERNEL MATERIAL WAS SALVAGED.
				HULLS		HULLS		BELT THRESHER	SEQ.						
				HULLS		HULLS		SCREENS	SEQ.#12,11,10,9,8,7, 6 RD						
				HULLS		HULLS		PNEUMATIC	SEQ.	GOOD					
1205	FAGOPYRUM	ESCULENTUM	BUCKWHEAT	INERT		SOIL	REMOVE SOIL AND OTHER INERT MATERIAL								
1219	FESTUCA	ARUNDINACE	REBEL II TALL FESCUE	DACTYLIS	GLOMERATA	ORCHARDGRASS	REMOVE ORCHARDGRASS	PNEUMATIC	SDB @15	GOOD	518 /LB			SOUTH DAKOTA BLOWER WAS USED TO LIFT THE ORCHARDGRASS. DOUBLES AND EMPTIES COMPRISED MOST OF THE LIFTED FRACTION. SEVERAL ORCHARDGRASS WERE ALSO FOUND IN THE LIFTED FRACTION ANS\D NONE WERE FOUND IN THE UNLIFTED FRACTION.	
1162	FESTUCA	ARUNDINACEA	TURF TYPE TALL FESCUE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	SCREEN	HAND SCREEN 4X22 WIRE WOVEN	FAIR	100	75	100	THIS SAMPLE WAS FROM A 50000 LB LOT WITH 30 QUACK PER POUND AFTER CONDITIONING. QUACKGRASS IS PROHIBITED SO NEEDS TO BE COMPLETELY REMOVED. FAX NO IS 503-633-4434.	A RECOMMENDATION TO USE 4X22 W
1247	FESTUCA	ARUNDINACEA	TALL FESCUE	ALLIUM	VINEALE	WILD GARLIC		SCREEN	4X20	GOOD		100		SCREENS HELD ALL OF THE WILD GARLIC AND SOME OF THE MULTIPLE FLORETTS OF THE CROP. THE SMALLER SCREEN WAS TESTED TO BE SURE TO REMOVE ALL OF THE CONTAMINANT.	USE A 4X20 (ALT 4X22)WOVEN WIRE SCREENTO REMOVE WILD GARLIC FROM TALL FESCUE.
				ALLIUM	VINEALE	WILD GARLIC		SCREEN	4X22	GOOD		100			
164	FESTUCA	ARUNDINACEA	ALTA FESCUE	ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL	REMOVE BUR BEAKCHERVIL.	INDENT DISC	R4-1/2 DISK, 70RPM	GOOD	91	92	99		BEST SEPARATION WITH R4-1/2 INDENT DISK WHICH REDUCED CHERVIL FROM 9% TO 1% WITH A SHRINKAGE OF 32% OF THE ORIGINAL LOT.
				ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL		ELECTROSTATIC		POOR					
				ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL		VIBRATORY		POOR					
812	FESTUCA	ARUNDINACEA	ANTHRISCUS	DACTYLIS	GLOMERATA	ORCHARDGRASS	REMOVE ORCHARDGRASS	SCREEN	4X22 WIRE MESH	FAIR					THIS SAMPLE CAN POSSIBLY BE CLEANED TO THE DESIRED PURITY USING A SEQUENCE OF MACHINES INCLUDING PNEUMATIC, SCREENS, GRAVITY, AND INDENT DISCS.
								INDENT DISC	V6 1/2 DISC	FAIR					
								PNEUMATIC		FAIR					
								GRAVITY		FAIR					
862	FESTUCA	ARUNDINACEA	TALL FESCUE	GALIUM	TRICORNE	CORN BEDSTRAW	REMOVE CORN BEDSTRAW	INDENT CYLINDER	#8 CYLINDER	GOOD	100	100	100		THE #8 INDENT CYLINDER WAS ABLE TO REMOVE ALL THE BEDSTRAW WITH ONLY 8% CROP LOSS.
				GALIUM	TRICORNE	CORN BEDSTRAW		SCREEN	1/16 ROUND HOLE	FAIR	100	50	100		
				GALIUM	TRICORNE	CORN BEDSTRAW		GRAVITY		FAIR	100	50	100		
391	FESTUCA	ARUNDINACEA	TALL FESCUE	LOLIUM		RYEGRASS	REMOVE RYEGRASS.	PNEUMATIC		POOR				SEED MEASUREMENTS INDICATE THAT ALL DIMENSIONS OVERLAP SO INDENT OR SCREEN SEPARATION IS NOT POSSIBLE.	NO SUCCESS WITH THIS SAMPLE.
				LOLIUM		RYEGRASS		VIBRATORY		POOR					
				LOLIUM		RYEGRASS		OTHER	BOUNCE PLATE	POOR					
751	FESTUCA	ARUNDINACEA	TALL FESCUE	LOLIUM	PERENNE, MULTIFLORUM	PERENNIAL, ANNUAL RYEGRASS	REMOVE ANNUAL AND PERENNIAL RYEGRASS	PNEUMATIC	BATCH-TYPE SEPARATOR	GOOD		72	97		GRAVITY AND PNEUMATIC SEPARATORS ARE THE BEST APPROACH TO REMOVING RYEGRASS FROM FESCUE, BUT THE MAXIMUM CONTAMINANT SEED LEVEL OF .5% AS REQUIRED FOR CERTIFICATION IS UNATTAINABLE WITHOUT SIGNIFICANT CROP LOSS.
				LOLIUM	PERENNE, MULTIFLORUM	PERENNIAL, ANNUAL RYEGRASS		GRAVITY	DECK=PERF. CU, SIDESLOPE=9.5, BACKSLOPE=1.0, AIR=3, SPEED=725	FAIR		80	97		
808	FESTUCA	ARUNDINACEA	TALL FESCUE	LOLIUM		PENNFINE RYEGRASS	REMOVE PENNFINE RYEGRASS	SCREEN	SEQ.6X20 SLOTTED SCREEN	GOOD					FRACTIONS FROM THE ABOVE SCREENING/INDENT CYLINDER SEQUENCE WERE SENT TO SUBMITTER FOR PURITY TESTS.
				LOLIUM		PENNFINE RYEGRASS		INDENT CYLINDER	#16 INDENT CYLINDER	GOOD					
820	FESTUCA	ARUNDINACEA	TALL FESCUE	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	REMOVE ANNUAL RYEGRASS	VELVET ROLL	3 PASSES	POOR	90	38	94	MEASUREMENTS OF THE TWO SEEDS OVERLAP IN ALL DIMENSIONS. THE FESCUE APPEARS SLIGHTLY ROUGHER IN TEXTURE THAN THE RYEGRASS.	POOR RESULTS WITH THE VELVET ROLLS.
1002	FESTUCA	ARUNDINACEA	TURF TYPE TALL FESCUE	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	REMOVE ANNUAL RYEGRASS TO 270 OR LESS /LB. INTITAL IS 570/LB	VELVET ROLL	200 RPM	FAIR	100	50			
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		GRAVITY		FAIR	100	50			
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		COLOR SORTER	#54 FILTER	FAIR	100				
1143	FESTUCA	ARUNDINACEA	TURF TYPE TALL FESCUE	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	REMOVE ANNUAL RYEGRASS	GRAVITY	WESTRUP,550RPM,SSLOPE2.5,BSLOPE4	POOR	65	50	65	THE MIXTURE IS CURRENTLY 35% RYEGRASS AND 65% FESCUE AND THE DESIRED MIX IS 15	
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		SCREENS	HAND SHAKING	POOR	65	50	65		

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		GRAVITY	SSS,CU DECK,565RPM,SSLOPE1.5,BSLOPE FLAT,AIR HIGH	POOR	65	50	65		
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		VELVET ROLL	12.5 DEG, 125 RPM	POOR					
1192	FESTUCA	ARUNDINACEA	TALL FESCUE	LOLIUM		RYEGRASS		GRAVITY		POOR	178 /#		267 /#	THIS WAS A SMALL LOT OF BREEDER SEED FOR A FIELD TRIAL. INITIAL	RYEGRASS COUNT INCREASED IN THE FINAL PURITY CHECK. AS MOST OF THE OPERATIONAL LOSSES WERE IN THE LOW SIDE AND THE HIGH
				LOLIUM LOLIUM		RYEGRASS		INDENT CYLINDER	LIFTED SMALL	POOR			100		
				AGROSTIS		BENTGRASS		GRAVITY		POOR					
				AGROSTIS		BENTGRASS		INDENT CYLINDER	LIFTED SMALL BENTGRASS	BEST	89/#		0		
659	FESTUCA	ARUNDINACEA	TALL FESCUE	POA	PERENNE	PERENNIAL RYEGRASS	REMOVE PERENNIAL RYEGRASS							MATERIAL HAD BEEN PROCESSED OVER AIR-SCREEN AND CONTAINED 3% RYEGRASS.	THREE FRACTIONS WERE OBTAINED FROM EACH OF FOUR DIFFERENT SEPARATION TRIALS; BOUNCE PLATE, PNEUMATIC SEPARATOR, SLOTTED SCREENS AND ROUND-HOLE SCREENS. PURITY ANALYSES WERE NOT DONE, BUT FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.
773	FESTUCA	ARUNDINACEA	TALL FESCUE	POA	PRATENSIS	KENTUCKY BLUEGRASS	REMOVE KENTUCKY BLUEGRASS	SCREEN	1/22 ROUND-HOLE ON VIBRATOR						7 GRAMS OF MIXTURE WAS PLACED ON THE SCREEN. THE FRACTION THAT WENT THROUGH CONTAINED 3 BLUEGRASS SEEDS.
53	FESTUCA	ARUNDINACEA	ALTA FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE, HAIRY CHESS, SHEEP SORREL AND RYEGRASS.	AIR-SCREEN	SEQ.1/14 RD W/3 DAMS OVER 4X22 MESH, SHAKE-440	GOOD	97	90	99		WITH THE AIR SCREEN MACHINE, 88.9% OF THE ORIGINAL LOT WAS RECLAIMED AT A PURITY OF 99%. ALTHOUGH RATTAIL FESCUE AND HAIRY CHESS DROPPED SIGNIFICANTLY, THE SORREL DID NOT. THE INDENT DISC WAS FOUND T
				RUMEX	ACETOSELLA	SHEEP SORREL		INDENT DISC	SEQ.V4 1/2 DISC	GOOD					
776	FESTUCA	ARUNDINACEA	TALL FESCUE				SUBMITTER REQUESTED MEASUREMENTS ON SAMPLE OF FESCUE CONTAMINATED WITH RYEGRASS.								MEASUREMENTS WERE MADE AND VERY LITTLE DIFFERENCE IN DIMENSION WAS FOUND.
975	FESTUCA	ARUNDINACEA	TALL FESCUE												
1215	FESTUCA	ARUNDINACEA	TURF TYPE TALL FESCUE												
1261	FESTUCA	CALIFORNICA													
874	FESTUCA	FELOPA	FESCUE	ERGOT		ERGOT	REMOVE ERGOT	BELT THRESHER	SEQ.		0				SAMPLE WA
				ERGOT		ERGOT		GRAVITY	SEQ.		0				
1262	FESTUCA	IDAHOENSIS													
1229	FESTUCA	LONGIFOLIA	HARD FESCUE	POA	ANNUA	ANNUAL BLURGRASS	REMOVE ANNUAL BLUEGRASS	INDENT CYLINDER	3.32MM	GOOD	21/LB			INITIAL LEVEL WAS ONLY 21/LB SO NO BLUEGRASS COULD BE FOUND IN THE ORIGINAL MATERIAL. RUNNING THE MATERIAL ON A 3.25MM INDENT CYLINDER AND EXAMINING THE LIFTED FRACTION REVELAED SEV	USE A 4.00MM INDENT CYLINDER TO REMOVE POA ANNUA FORM HARD FESCUE.
				POA	ANNUA	ANNUAL BLUEGRASS		INDENT CYLINDER	4.00MM	GOOD	21/LB				
777	FESTUCA	OVINA	SHEEP FESCUE	FESTUCA		OVINA	REMOVE DOUBLES, MULTIPLES AND EMPTIES	OTHER	SEQ.GRADER: #6 1/2 RD HOLE					SUBMITTER CONDUCTED TESTS.	THE SHEEP FESCUE WAS SATISFACTORILY CLEANED USING THE SEQUENCE OF: PRECISION GRADER, BELT THRESHER AND PNEUMATIC SEPARATOR.
1158	FESTUCA	OVINA	SHEEP FESCUE (3 VARS)	FESTUCA	OVINA	FIELD RUN SHEEP FESCUE		BELT THRESHER	SEQ.					THREE VARITIES OF SHEEP FESCUE WERE SCREENED TO DETERMINE PROPER SCREEN SIZES.	
				FESTUCA	OVINA	FIELD RUN SHEEP FESCUE		PNEUMATIC	SEQ 5-1/2 TO 6 RH BOTTOM						
1046	FESTUCA	OVINA	SHEEP FESCUE	INERT		SOIL	REMOVE SOIL	INDENT CYLINDER	2.75 MM	GOOD	0	100	0	THIS WAS A SAMPLE TO BE SENT TO AUSTRALIA. SOIL, MOSTLY STONES, HAD TO BE REMOVED COMPLETELY. THE LIFTED FRACTION CONTAINED THE STONES, GROATED SEED AND SOME WEED SEED.	USE 2.75 MM TO REMOVE SOIL PARTICLES FROM SHEEP FESCUE.
87	FESTUCA	RUBRA	RED CREEPING FESCUE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS.	AIR-SCREEN	1/21 RD W/3 METAL DAMS			100	100		THE AIR-SCREEN MACHINE REMOVED ALL OF THE QUACKGRASS FROM THE FESCUE, BUT WITH A FAIRLY LARGE CROP LOSS.
292	FESTUCA	RUBRA	CREEPING RED FESCUE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	SCREENS	1/21 OVER 4X26 SLOT	GOOD		100	100		THE 1/21 SCREEN HELD NEARLY ALL QUACKGRASS AND CROP DOUBLES, AND THE 4X26 DROPPED THE REST OF THE QUACKGRASS.
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY		POOR					
330	FESTUCA	RUBRA	CREEPING RED FESCUE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	SCREENS	SEQ.1/22 W/DAMS OVER 6X26	GOOD					THE RECOMMENDATION IS
				AGROPYRON	REPENS	QUACKGRASS		SCREEN	SEQ.6X24, FRACT OVER 1/22	GOOD					
				AGROPYRON	REPENS	QUACKGRASS		SCREEN	SEQ.6X25, FRACT OVER 6X26	GOOD					
338	FESTUCA	RUBRA	CREEPING RED FESCUE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS FROM LOT WHICH HAD ALREADY BEEN THROUGH A 1/22 SCREEN.	SCREEN	1/24 ROUND HOLE	FAIR		100	100		SEV
				AGROPYRON	REPENS	QUACKGRASS		SCREEN	6X24 SLOT	GOOD		100	100		
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY	AB-CANVAS-L DECK	GOOD		100	100		

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				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		GOOD		100	100		
373	FESTUCA	RUBRA	FINE FESCUE	ANTHOXANTHUM	ODORATUM	SWEET VERNALGRASS	REMOVE SWEET VERNALGRASS							FESCUE MEASUREMENTS INCLUDE AWNS. SWEET VERNALGRASS MEASUREMENTS DO NOT INCLUDE AWNS.	MEASUREMENTS ONLY.
858	FESTUCA	RUBRA	FINE FESCUE	ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL	REMOVE BUR CHERVIL	GRAVITY	PERF METAL DECK, AIR=2.25, F=575, SDSL=9, BKSL=2.75	GOOD	100			SCREENS AND INDENT CYLINDERS WERE INEFFECTIVE.	BUR CHERVIL MAY BE REMOVED FROM FINE FESCUE BY GRAVITY TABLE OR AIR SEPARATION.
								PNEUMATIC	6X6	GOOD	100	50			
22	FESTUCA	RUBRA	CREEPING RED FESCUE	BROMUS	SECALINUS	CHESS	REMOVE CHESS.	AIR-SCREEN	1/12 TOP, #5 BOTTOM SCREEN	FAIR			100		BOTH THE AIR-SEPARATOR AND PNEUMATIC SEPARATOR MADE GOOD SEPARATIONS, BUT WITH LARGE CROP LOSS.
				BROMUS	SECALINUS	CHESS		PNEUMATIC		FAIR			100		
89	FESTUCA	RUBRA	FINE FESCUE	BROMUS	RIGIDUS	RIPGUT	REMOVE RIPGUT AND OTHER CONTAMINANTS	AIR-SCREEN	1/16 W/3 DAMS OVER 4X26	FAIR	43		74		THE BEST SEPARATION WAS WITH THE AIR-SCREEN MACHINE. STILL 50% OF THE CROP WAS LOST AND THE FINAL PURITY WAS 74%.
91	FESTUCA	RUBRA	FINE FESCUE	BROMUS	SECALINUS	CHEAT	REMOVE CHEAT.	INDENT DISC	V6 DISC W/CHUTES EXTENDED BY AL STRIPS			100	100		THE V6 INDENT DISC REMOVED ALL CHEAT WITH AN UNDETERMINED CROP LOSS. THE AIR-SCREEN MACHINE WITH 1/24 SCREEN SALVAGED 77% OF THE LOT WITH 99 CHEAT/LB REMAINING.
				BROMUS	SECALINUS	CHEAT		AIR-SCREEN	1/24 SCREEN W/2 1/8" DAMS						
				BROMUS	SECALINUS	CHEAT		PNEUMATIC		POOR					
				BROMUS	SECALINUS	CHEAT		ELECTROSTATIC		POOR					
412	FESTUCA	RUBRA	RED FESCUE	BROMUS	SECALINUS	CHESS	REMOVE CHESS	GRAVITY		GOOD				SEED MEASUREMENTS INDICATE THAT A 1/25" ROUND-HOLE SCREEN SHOULD REMOVE 92% OF THE CHESS ALONG WITH 44% OF THE FESCUE.	RECOMMENDED PROCEDURE IS TO SCREEN THE LOT WITH A 1/25" ROUND-HOLE SCREEN. THEN RUN THE HELD FRACTION ON THE GRAVITY TABLE TO SALVAGE MORE FESCUE. IF THE DROPPED FRACTION SHOWS EXCESSIVE CHESS, IT CAN BE RUN OVER GRAVITY TABLE, ALSO.
1171	FESTUCA	RUBRA	FINE FESCUE	ERGOT		ERGOT	REMOVE ERGOT	PNEUMATIC	SDB	GOOD	0.7	90	0.1	THIS SAMPLE CONTAINED 0.67% ERGOT. EXPORT TO JAPAN REQUIRES 0.05% OR LESS. PNEUMATIC SEPARATION REMOVED A MAJORITY OT THE ERGOT BY LIFTIN	USE PNEUMATIC SEPARATOR TO LIFT THE CROP AWAY FROM A MAJORITY OF THE ERGOT.
				ERGOT		ERGOT		DEBEARDER	SEQ1. LAH W/#14WW						
				ERGOT		ERGOT		SCREEN	SEQ1. 0.70MM SLOT						
				ERGOT		ERGOT		PNEUMATIC	SEQ1. SDB ON BOTH SPLITS FROM AIR						
1100	FESTUCA	RUBRA	FINE FESCUE	FESTUCA	RUBRA	FINE FESCUE DOUBLES	DETERMINE TOP SCREEN SIZES TO REMOVE DOUBLES FROM FINE AND TALL FESCUE AND PERENNIAL RYEGRASS	SCREEN	8RH,2X10 3X12, 4X14, 3/64X5/16, 1/22X1/2					THIS WAS A TELEPHONE REQUEST FOR INFORMATION ON SCREENS TO REMOVE DOUBLES FROM SMALL SAMPLES OF THESE GRASSES. RESULTS WERE FROM THE MANUFACTURERS RECCOMENDATIONS.	
1121	FESTUCA	RUBRA	CHEWINGS FESCUE	INERT		INERT	DETERMINE CLEANING SEQUENCE	SCREEN	SEQ 8/64 RH,4X30 WW	GOOD				THIS WAS FIELD-RUN MATERIAL THAT WAS 30-40% INERT. A SEQUENCE OF THE ABOVE MACHINES REMOVED MOST OF THE CONTAMINANT LEAVING 67% OF THE ORIGINAL WIEGHT APPROXIMATELY 99% PURE.	USE A SEQUENCE OF 8/64 RH, 4X30 WW, AIR AND 8 MM INDENT CYLINDER TO REMOVE INERT MATERIAL FROM CHEWINGS FESCUE.
				INERT		INERT		PNEUMATIC	SEQ	GOOD					
				INERT		INERT		INDENT CYLINDER	SEQ 8 MM	GOOD					
65	FESTUCA	RUBRA	RED CREEPING FESCUE	LOLIUM		RYEGRASS	REMOVE RYEGRASS, RATTAIL FESCUE AND HAIRY CHESS.	AIR-SCREEN	1/19 OVER 6X26	FAIR	53	66	82		SEPARATING RESULTS FOR THIS SAMPLE WERE UNSATISFACTORY. THE BEST THAT COULD BE DONE WAS TO SALVAGE 43% OF THE LOT AT A PURITY OF 82% ON THE AIR-SCREEN MACHINE. PART OF THE PROBLEM WAS THE SIZE OVERLAP OF THE RYEGRASS AND THE CREEPING FESCUE.
				VULPIA	MYUROS	RATTAIL FESCUE		ELECTROSTATIC		POOR					
				BROMUS	COMUTATUS	HAIRY CHESS		VIBRATORY		POOR					
93	FESTUCA	RUBRA	CREEPING RED FESCUE	LOLIUM		RYEGRASS	REDUCE RYEGRASS AND, POSSIBLY, RATTAIL FESCUE.	PNEUMATIC		POOR				RYEGRASS CONCENTRATION WAS ORIGINALLY 0.90% AND RATTAIL FESCUE CONCENTRATION WAS 130/LB.	BEST RESULTS WITH THE AIR-SCREEN MACHINE. 70% OF THE SAMPLE WAS RECOVERED AT 99.6% PURITY. RYEGRASS WAS REDUCED TO .4% AND FESCUE TO 103/LB.
				LOLIUM		RYEGRASS		SCREEN	1/21 ROUND HOLE	GOOD					
				LOLIUM		RYEGRASS		AIR-SCREEN	1/21 W/DAMS OVER 6X26 W/DAMS	GOOD	99	50	100		
803	FESTUCA	RUBRA	CHEWINGS FESCUE	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	INDENT CYLINDER	#8	GOOD	95	100	100	GRAVITY TABLE AND AIR COLUMN WERE INEFFECTIVE FOR THIS SEPARATION.	A V5 AND V5 1/2 INDENT DISCS AND #7 AND #8 INDENT CYLINDERS GAVE THE BEST SEPARATION OF ANNUAL BLUEGRASS FROM CHEWINGS FESCUE.
								INDENT CYLINDER	#7	GOOD	95	94	100		
								INDENT DISC	V5	GOOD	95	98	100		
								INDENT DISC	V5 1/2	GOOD	95	100	100		
962	FESTUCA	RUBRA	RED FESCUE	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS.	INDENT CYLINDER	4 MM CYLINDER	GOOD		100	100		THE 4MM INDENT CYLINDER REMOVED ALL ANNUAL BLUEGRASS FROM THE FESCUE. ORIGINAL LOT HAD 15 BLUEGRASS/LB.
1001	FESTUCA	RUBRA	FINE FESCUE	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS TO 0/LB INITIAL QUANTITY IS 15/LB	INDENT CYLINDER	4MM POCKET	GOOD		100		THIS SEPARATION APPEARED COMPLETE WITH MINIMAL CROP LOSS	INDENT CYLINGER WITH 4 MM POCKET REMOVED ALL POA ANNUA IN EXAMINATION

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1135	FESTUCA	RUBRA	FINE FESCUE	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL AND KENTUCKY BLUEGRASSES FROM FINE FESCUE	INDENT CYLINDER	3.75 MM POCKET	GOOD	45/LB	100	0/LB	THIS WAS TWO LOTS OF FINE FESCUE WITH MANY SPECIES OF WEED SEEDS. A 3.75 MM INDENT CYLINDER REMOVED MANY OF THESE INCLUDING THE POA SPP. COMMON CHICKWEED, WILDBUCKWHEAT, SHEEPSORREL	
				POA	PRATENSIS	KENTUCKY BLUEGRASS		INDENT CYLINDER	3.75 MM POCKET	GOOD	15/LB	100	0/LB		
80	FESTUCA	RUBRA	FINE FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE.	AIR-SCREEN	#7 RD HOLE OVER 6X28 WIRE W/DAMS	GOOD	82	99	99		BEST SEPARATION OBTAINED WITH THE AIR-SCREEN MACHINE USING #7 ROUND HOLE OVER A 6X28 WIRE MESH. IN ALL THE TRIALS, THE BOTTOM SCREEN TENDED TO CLOG UP AND SEEDS IN THE FEED HOPPER TENDED TO BRIDGE.
				VULPIA	MYUROS	RATTAIL FESCUE		ELECTROSTATIC	19KV, ROT=3, HOR=6-1/2, VERT=9-1/4	FAIR	82		95		
				VULPIA	MYUROS	RATTAIL FESCUE		PNEUMATIC		POOR					
				VULPIA	MYUROS	RATTAIL FESCUE		VELVET ROLL		POOR					
				VULPIA	MYUROS	RATTAIL FESCUE		VIBRATORY		POOR					
96	FESTUCA	RUBRA	CREEPING RED FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE AND BLUEGRASS FROM FESCUE SEEDS AND GROATS.	AIR-SCREEN	1/12 W/DAMS OVER 4X32, LOW AIR	GOOD	98	85	99		BEST RESULTS WITH AIR-SCREEN MACHINE, YIELDING 71% OF ORIGINAL SAMPLE AT 99.4% PURITY. 75% OF THE CONTAMINANTS WERE REMOVED.
				POA		BLUEGRASS		AIR-SCREEN	1/12 W/DAMS OVER 4X32, LOW AIR	GOOD	98	80	99		
				VULPIA	MYUROS	RATTAIL FESCUE		INDENT DISC	AV3-1/2 AND AV4-1/2 DISCS	POOR					
				POA		BLUEGRASS		INDENT DISC	AV3-1/2 AND AV4-1/2 DISCS	POOR					
162	FESTUCA	RUBRA	CREEPING RED FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE	AIR-SCREEN	#7 ROUND OVER 6X26 W/DAMS	GOOD	90		98		THE AIR-SCREEN MACHINE MADE A GOOD SEPARATION. ALTHOUGH OTHER MACHINES WERE NOT TRIED, LENGTH MEASUREMENTS INDICATE THAT AN INDENT CYLINDER WITH A HOLE .310"DIAM AND .024"DEPTH SHOULD REJECT ALL RATTAIL FESCUE AND RECOVER ABOUT 85% OF THE RED FESCUE.
				VULPIA	MYUROS	RATTAIL FESCUE		AIR-SCREEN	#7 ROUND OVER 6X28 W/DAMS, NO AIR	GOOD	90		97		
407	FESTUCA	RUBRA	MYUROS	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE	INDENT DISC	SEQ.V6 DISC	FAIR					RECOMMENDED PROCEDURE IS TO USE A 4X22 WIRE SCREEN WHICH SHOULD SCALP OFF ABOUT 40% OF THE FESCUE FREE OF RATTAIL. THEN RUN THE THROUGH FRACTION OVER THE V6 INDENT DISC AND THE 6X25 SCREEN TO SALVAGE MORE FESCUE.
				VULPIA	MYUROS	RATTAIL FESCUE		SCREEN	SEQ.6X25	FAIR			100		
				VULPIA	MYUROS	RATTAIL FESCUE		VIBRATORY		POOR					
1225	FESTUCA	RUBRA	FINE FESCUE				BREAK MULTIPLE FLORETTS							THIS IS WORK WITH BREEDER SEED SO SMALL LOTS ARE THE RULE.	
82	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS.	AIR-SCREEN	1/23 RD HOLE W/3 DAMS	GOOD	100	100	100		BEST RESULTS WITH THE AIR-SCREEN MACHINE WITH A 1/23 ROUND HOLE TOP SCREEN WITH 3 DAMS. NO BOTTOM SCREEN WAS USED. 88% OF THE FESCUE WAS RECLAIMED WITH ALL QUACKGRASS REMOVED.
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY		POOR					
				AGROPYRON	REPENS	QUACKGRASS		SCREEN	1/23 RD HOLE HAND SCREEN	GOOD	100	100	100		
85	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS AND REDUCE RYEGRASS AND ORCHARDGRASS TO ABOUT 0.5% COMBINED.	AIR-SCREEN	1/20 SCREEN W/3 DAMS	GOOD		100	100		A 1/21 SCREEN ON THE AIR-SCREEN MACHINE PERFORMED VERY WELL, REMOVING ALL QUACKGRASS AND REDUCING RYEGRASS AND ORCHARDGRASS TO A COMBINED .15%. 97.3% OF THE CROP WAS SALVAGED AT 99.6% PURITY.
				LOLIUM		RYEGRASS		AIR-SCREEN	1/20 SCREEN W/3 DAMS	POOR		0	100		
				DACTYLIS	GLOMERATA	ORCHARDGRASS		AIR-SCREEN	1/20 SCREEN W/3 DAMS	GOOD		50	100		
				AGROPYRON	REPENS	QUACKGRASS		ELECTROSTATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY		POOR					
427	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	AVENA	FATUA	WILD OATS	REMOVE WILD OATS.	SCREEN	6X21	GOOD					THE 1/21 ROUND-HOLE AND 6X21 SCREENS BOTH DID VERY WELL. THE 1/21 SCREEN REMOVE ALL OATS AND THE 6X21 ALLOWED ONLY ONE OAT GROAT TO GO THROUGH. IT IS RECOMMENDED TO USE DAMS WITH THE ROUND-HOLE SCREEN.
				AVENA	FATUA	WILD OATS		SCREEN	1/21 ROUND-HOLE	GOOD		100	100		
182	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	DACTYLIS	GLOMERATA	ORCHARDGRASS	REMOVE ORCHARDGRASS	VIBRATORY	FINE SANDPAPER DECK	FAIR	98	67	99	LENGTH SEPARATIONS WERE NOT TRIED BECAUSE OF CONSIDERABLE OVERLAP IN SEED DIMENSIONS.	BEST RESULTS WERE WITH SCREENS. A 99.7% PURE SAMPLE WAS OBTAINED WITH 10% LOSS. A PURER SAMPLE COULD BE OBTAINED, BUT WITH A HIGHER LOSS. MUCH OF THE SEED DISCARDED FROM THE SCREENS WAS DOUBLES AND PARTS OF SEEDS HANGING ON THE RACHILLAS.
				DACTYLIS	GLOMERATA	ORCHARDGRASS		SCREEN	6X23	GOOD	98	83	100		
				DACTYLIS	GLOMERATA	ORCHARDGRASS		SCREEN	6X24	GOOD	98	88	100		
				DACTYLIS	ORCHARDGRASS	ORCHARDGRASS		SCREEN	6X25	GOOD	98	96	100		
				DACTYLIS	GLOMERATA	ORCHARDGRASS		PNEUMATIC		POOR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
188	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	FESTUCA	ARUNDINACEA	TALL FESCUE	REMOVE TALL FESCUE FROM CHEWINGS FESCUE (SINGLES AND DOUBLES).	SCREEN	1/19 ROUND HOLE W/DAMS	FAIR	79	91	97		WITH THIS SAMPLE, NO GOOD METHOD WAS FOUND TO MAKE THE SEPARATION AND STILL SAVE THE CHEWINGS FESCUE DOUBLES. A 1/19 SCREEN WORKED THE BEST, BUT THE 19% CROP LOST CONSISTED ENTIRELY OF DOUBLES.
				FESTUCA	ARUNDINACEA	TALL FESCUE		PNEUMATIC		POOR					
				FESTUCA	ARUNDINACEA	TALL FESCUE		VELVET ROLL		POOR					
				FESTUCA	ARUNDINACEA	TALL FESCUE		ELECTROSTATIC		POOR					
75	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	HOLCUS		VELVETGRASS	REMOVE VELVET GRASS.	AIR-SCREEN	1/25 ROUND HOLE, NO AIR						THE AIR SCREEN MACHINE DID A GOOD JOB OF THIS SEPARATION USING A 1/25 RD HOLE SCREEN WITH NO AIR OR A 1/24 ROUND HOLE SCREEN WITH AIR.
				HOLCUS	LANATUS	VELVETGRASS		AIR-SCREEN	1/24 ROUND HOLE, W/AIR	GOOD					
84	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	INERT		INERT	REDUCE INERT MATERIAL, MUCH OF WHICH IS ERGOTIZED SEED.	AIR-SCREEN	1/20 W/DAMS OVER 6X28 W/DAMS		96	70	98		THE AIR-SCREEN MACHINE INCREASED FESCUE PURITY SLIGHTLY AND SMALL REDUCTIONS WERE MADE IN INERT, RYEGRASS, AND WEED CONTENT.
86	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	INERT		INERT	REDUCE INERT TO ABOUT 1.0% AND CROP AND WEED CONTENT TO .50%. HOWEVER, ACCORDING TO OUR ANALYSIS, THE LOT ALREADY MEETS THESE PURITY REQUIREMENTS.	AIR-SCREEN	20X20 W/DAMS OVER 24X24	GOOD	98	30	99		BEST
				DACTYLIS	GLOMERATA	ORCHARDGRASS		AIR-SCREEN	20X20 W/DAMS OVER 24X24	GOOD	98	60	99		
				LOLIUM		RYEGRASS		AIR-SCREEN	20X20 W/DAMS OVER 24X24	GOOD	98	98	99		
81	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	LOLIUM		RYEGRASS	REDUCE RYEGRASS TO .50%.	AIR-SCREEN	1/25 ROUND HOLE W/DAMS	GOOD	87	97	100		BEST RESULTS WERE HAD WITH
				LOLIUM		RYEGRASS		PNEUMATIC		POOR					
				LOLIUM		RYEGRASS		VIBRATORY		POOR					
83	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	LOLIUM		RYEGRASS	REDUCE RYEGRASS TO 0.5% AND INCREASE FESCUE PURITY TO 98%.	AIR-SCREEN	20X20 TOP SCREEN W/DAMS, 7/16" STROKE	GOOD	96	97	100		A 20X20 SCREEN ON THE AIR-SCREEN MACHINE MET THE REQUIREMENTS BY YIELDING A 99.9% PURE FESCUE SAMPLE WITH .12% RYEGRASS.
557	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE (BREEDER)	RUMEX		DOCK	DETERMINE SCREEN SIZES TO REMOVE DOCK, SORREL, ORCHARD GRASS, BLUEGRASS, RYEGRASS, BENTGRASS AND RATTAIL FESCUE.	SCREENS	6X24 TOP, 6X28 BOTTOM W/DAMS						A 6X24 TOP SCREEN AND A 6X28 BOTTOM SCREENS WITH DAMS REMOVED MOST OF THE CONTAMINANTS EXCEPT THE BLUEGRASS.
				RUMEX		SORREL									
				DACTYLIS	GLOMERATA	ORCHARDGRASS									
				POA		BLUEGRASS									
				LOLIUM		RYEGRASS									
				AGROSTIS		BENTGRASS									
				VULPIA	MYUROS	RATTAIL FESCUE									
61	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE, RYEGRASS AND OTHER WEED SEEDS.	AIR-SCREEN	#6 OVER 6X28	GOOD	88	75	97	BOTH SCREENS TENDED TO PLUG UP AND NEEDED TO BE BRUSHED CLEAN.	THE AIR-SCREEN MACHINE WAS ABLE TO RECOVER 83% OF THE ORIGINAL MATERIAL AT 97% PURITY. LATER TRIALS INDICATE THAT RYEGRASS CAN BE FURTHER REDUCED BY ANOTHER SEPARATION USING A 1/18 SCREEN.
94	FESTUCA	RUBRA COMMUTATA	CHEWINGS FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REDUCE RATTAIL FESCUE, ORCHARDGRASS, BLUEGRASS AND VELVETGRASS. ORIGINAL SAMPLE CONTAINED 930/LB, 1116/LB, 930/LB AND 744/LB RESPECTIVELY.	AIR-SCREEN	VARIOUS SCREENS, 360 RPM, 5/8" STROKE	GOOD	99			PNEUMATIC SEPARATION WAS INEFFECTIVE. 3 CLIPPER SETUPS WERE USED: #1. 4X22 OVER 4X28,#2. 4X24 OVER 6X28, #3. 4X24 OVER 4X28	THE AIR-SCREEN MACHINE WORKED VERY WELL ON THIS MIXTURE. THE SPECIFIC SCREENS USED DEPEND ON WHICH IMPURITIES IT IS MOST DESIRED TO REMOVE.
				DACTYLIS	GLOMERATA	ORCHARDGRASS		AIR-SCREEN		GOOD	99				
				POA		BLUEGRASS		AIR-SCREEN		GOOD	99				
				HOLCUS		LANATUS		AIR-SCREEN		GOOD	99				
527	FESTUCA	RUBRA COMUTATA	CHEWINGS FESCUE	BROMUS	TECTORUM	DOWNEY CHESS	REMOVE DOWNEY CHESS AND BULBOUS BLUEGRASS.	AIR-SCREEN	SEQ.1/20 OVER 1/21	GOOD					MATERIAL HELD ON THE 1/20 SCREEN WAS RUN THROUGH THE PNEUMATIC SEPARATOR AND MATERIAL THROUGH THE 1/21 SCREEN WAS RUN ON THE INDENT. IN THIS WAY, 94% OF THE LOT WAS SAVED AS CLEAN FESCUE.
								PNEUMATIC	SEQ.	GOOD					
				POA	BULBOSA	BULBOUS BLUEGRASS		INDENT CYLINDER	SEQ.#7 CYLINDER	GOOD					
689	FESTUCA	RUBRA COMUTATA	CHEWINGS FESCUE	INERT		INERT	REMOVE DIRT CLODS AND LEGHT TRASHY SEED	GRAVITY	END SLOPE=10, AIR=5, FORWARD SLOPE=3					INCLINED DRAPER, SCREENS, FRICTION, AND VIBRATOR SEPARATORS SHOWED LIMITED SUCCESS.	THE SPECIFIC GRAVITY SEPARATOR PERFORMED THE SEPARATION VERY WELL WITH MINIMAL SEED LOSS.
469	FESTUCA	RUBRA COMUTATA	CHEWINGS FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE	AIR-SCREEN	TOP-#6 RD, BOT-6X26 W/DAMS	GOOD					GOOD RESULTS WERE OBTAINED ON A TWO-SCREEN CLEANER. THE TOP SCREEN WAS A #6 ROUND-HOLE AND THE BOTTOM SCREEN WAS A 6X26 WIRE WITH 1/8"HIGH DAMS.
1222	FESTUCA	TRACHEPHYLLA	HARD FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE	SCREENS	SERIES:4X26,28,30		196 /LB			THIS SAMPLE REPRESENTED 6000 LBS OF REGISTERED SEED. TESTED LEVEL OF RATTAIL FESCUE WAS 196/LB.	

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169	FESTUCA		KENTUCKY 31 FESCUE	ALLIUM	CEPA	ONION	REMOVE ONION SEEDS	SCREEN	SEQ.1/15 ROUND HOLE	FAIR	52	57	72	THIS SAMPLE HAD BEEN WORKED WITH A YEAR BEFORE AND THE VIBRATOR HAD BEEN ABLE TO SALVAGE 65% OF THE FESCUE FREE OF ONION.	USING THE ABOVE SEQUENCE, ABOUT 50% OF THE FESCUE WAS RECLAIMED WITHOUT ONION.
				ALLIUM	CEPA	ONION		SCREEN	SEQ.6X24,THRU FRACT FROM 1/15	FAIR	72	56	81		
				ALLIUM	CEPA	ONION		INDENT CYLINDER	SEQ..19"DIA X .03"DEEP POCKET, HELD FRACTION FROM 6X24	GOOD	81	100	100		
52	FESTUCA		PENNLAWN FESCUE	LOLIUM		RYEGRASS	REMOVE RYEGRASS AND RATTAIL FESCUE.	AIR-SCREEN	1/22 OVER 6X28, WITH DAMS	GOOD	93	67	98		BEST RE
				VULPIA		MYUROS		AIR-SCREEN	1/22 OVER 6X28, WITH DAMS	GOOD	93	67	98		
76	FESTUCA		PENNLAWN FESCUE	LOLIUM		RYEGRASS	REMOVE RYEGRASS, BARLEY, OATS, HAIRGRASS AND VELVETGRASS.	SCREENS	MANY VARIOUS SIZES	POOR					NO TRIALS WERE SUCCESSFUL IN RECLAIMING PENNLAWN FESCUE FROM RYEGRASS.
				LOLIUM		RYEGRASS		PNEUMATIC		POOR					
				LOLIUM		RYEGRASS		VIBRATORY		POOR					
226	FESTUCA		PENNLAWN FESCUE	LOLIUM		RYEGRASS	REMOVE RYEGRASS	SCREEN	1/20 ROUND-HOLE	GOOD					THE 1/20 ROUND-HOLE SCREEN DID VERY WELL, HOLDING ABOUT 10% OF THE LOT CONTAINING RYEGRASS, DOUBLES AND A FEW LARGE FESCUE.
522	FESTUCA		PENNLAWN FESCUE	MISC		MISC	REMOVE ASSORTED WEEDS (MESQUITE, DOG FENNEL, SEDGE, SHEEP SORREL, RUSH, BLACKBERRY SEED), AND CLOVER, MUD CLODS, ETC.	SCREEN	SEQ. 1/15 ROUND-HOLE	GOOD					GOOD RESULTS WERE OBTAINED WITH A SCREEN FOLLOWED BY INDENT CYLINDER. AN ESTIMATED 2% OF THE CROP WAS LOST AND THE FINAL PRODUCT APPEARED ESSENTIALLY FREE OF CONTAMINANT.
				MISC		MISC		INDENT CYLINDER	SEQ. #5 INDENT	GOOD					
				MISC		MISC		GRAVITY		POOR					
				MISC		MISC		VIBRATORY		POOR					
97	FESTUCA		ILLAHEE FESCUE	VULPIA	MYUROS	RATTAIL FESCUE	SALVAGE FESCUE FROM THIS SAMPLE WHICH WAS A REJECT FRCTION FROM A SEPARATING PROCESS. CONTAMINANT IS RATTAIL FESCUE.	AIR-SCREEN	#6 OVER 4X28 W/DAMS	POOR	77	90	98	VARIOUS SCREEN COMBINATION WERE TRIED. TOP SCREENS WERE #6, #7, 4X18, 1/22X1/2 AND 3/64X5/16. BOTTOM SCREENS WERE 4X28, 4X30 AND 4X32; SOME WITH DAMS.	RESULTS WERE GENERALLY UNSATISFACTORY BECAUSE THE ILLAHEE FESCUE SEEDS WERE SMALL AND RESPONDED LIKE THE RATTAIL FESCUE.
1029	GAILLARDIA	ARISTATA	BLANKETFLOWER	INERT		INERT	REMOVAL OF INERT MATERIAL, LARGELY STEMS	VIBRATORY	DECK: SANDBLASTED METAL, SIDESLOPE=13, BACKSLOPE=15, FEED RATE=35	GOOD		75		THIS SAMPLE IS #734b IN THE FILES.	INERT MATERIAL CAN BE EFFECTIVELY SEPARATED FROM BLANKETFLOWER WITH THE VIBRATOR SEPARATOR. GOOD RESULTS WERE ALSO OBTAINED BY HAND-THRESHING THE SEED, PASSING IT THROUGH AN AIR COLUMN AND THEN SCREENING IT WITH A #6 ROUND-HOLE SCREEN.
974	GAILLARDIA		GAILLARDIA	DEBEARD			DEBEARD	DEBEARDER	LAH #12 MANTLE	FAIR				THE LAH HULLER SCARIFIER REMOVED A PORTION OF THE PAPUS FROM THIS SEED BUT APPEARED TO DAMAGE THE SEED TOO SEVERELY. TESTS OF OTHER MANTLE WIRE SIZES MAY IMPROVE RESULTS.	INCONCLUSIVE
1035	GAILLARDIA		GAILLARDIA	INERT		INERT	REMOVE INERT MATERIAL	VIBRATORY		FAIR				FORMERLY UNDER SAMPLE #736	
734	GAZANIA	SPLENDENS	GAZANIA	INERT		INERT	REMOVE INERT MATERIAL	GRAVITY	DECK: FINE CLOTH, BACKSLOPE=4, ENDSLOPE=11, SPEED=775, AIR=1.75	GOOD				THE INERT MATERIAL TENDED TO CLING TO GROUPS OF SEEDS BEFORE SEPARATION.	THE GRAVITY TABLE GAVE THE BEST RESULTS. VIBRATOR AND PNEUMATIC SEPARATORS ALSO WORKED BUT WITH HIGHER CROP LOSS. THIS REPORT WAS ORIGINALLY 734a. 734b, CONCERNING BLANKETFLOWER AND SUBMITTED BY THE SAME PERSON, HAS BEEN CHANGED TO 1029.
887	GAZANIA		GAZANIA	FUZZA	FURA	FUZZ	REMOVE FUZZ FROM SEEDS.	SCARIFIER	FILAMENT						FRACTIONS THRESHED ON THE FILAMENT SCARIFIER WERE SENT TO SUBMITTER FOR GERMINATION TESTS.
857	GAZANIA		GAZANIA	LINT		LINT	REMOVE LINT	OTHER	FILAMENT THRESHER	FAIR					THE FILAMENT THRESHER SHOWS SOME PROMISE AT REMOVING LINT FROM GAZANIA SEEDS BUT HAS VERY LIMITED CAPACITY.
658	GAZANIA		GAZANIA				REMOVE FUZZ FROM GAZANIA SEED								COMBING THE SEEDS ALONG A STIFF VERTICAL-PILE NYLON-FIBER SURFACE REMOVED WAS THE ONLY TECHNIQUE FOUND TO BE SUCCESSFUL.
800	GLYCINE	MAX	SOYBEAN	GLYCINE	MAX	SPLIT SOYBEANS	REMOVE SPLIT SOYBEANS FROM WHOLE SOYBEANS USING THE FRICTION SEPARATOR.	FRICTION	CARPET BELT, SCOTCHBRITE BAR						FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION. OTHER BAR/BELT MATERIALS WILL MORE EFFICIENTLY REMOVE SPLITS FROM ROUNDS.
1181	GLYCINE	MAX	SOYBEAN	ROCKS		ROCKS	REMOVE ROCKS, SOIL, SPLITS, AND INERT	AIR-SCREEN	18/64 X 3/4 SLOT TOP SCREEN	FAIR				A SEQUENCE OF HAND SCREENS FOLLOWED BY 2 PASSES OVER THE SPIRAL SEPARATOR REMOVED NEARLY	USE SCREENS, AIR, AND A SPIRAL SEPARATOR.
				ROCKS		ROCKS		AIR-SCREEN	11/64 X 3/4 SLOT BOTTOM SCREEN	GOOD	65	75	95		
				ROCKS		ROCKS		SPIRAL	LARGE SEED FLIGHT	GOOD	95	95	99		
977	GOMPHRENA		VARIOUS	GOMPHRENA			REMOVE PAPUS FROM GOMPHRENA	SCARIFIER	#12 SQWW	GOOD				SEED WAS RUN THROUGH 3 TIMES. REDUCTION IN WEIGHT WAS 10LB TO 4.5LB	LAH DID A GOOD JOB OF DEBEARDING GOMPHRENA.
				GOMPHRENA				BELT THRESHER		POOR					

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1097	GOMPHRENA		GOMPHRENA	GOMPHRENA		GOMPHRENA WITH FUZZ	DEFUZZ	SCARIFIER	LAH WITH #14 SQUARE WIRE MANTLE	GOOD				THIS MATERIAL WAS RUN AS A BATCH. DEFUZZED MATERIAL WAS DISCHARGED THROUGH FRONT OPENING. SEED REMOVED FROM THE HULL WAS PASSED THROUGH THE SCREEN.	USE LAH HULLER SCARIFIER WITH #14 SQUARE WIRE SCREEN.
1176	GOMPHRENA		GLOBE AMARANTH	INERT		PEICES OF RECEPTICLE	REMOVE INERT MATERIAL (PIECES OF THE RECEPTICLE). TEST SCREENS AND VIBRATORY AS WELL AS OTHER MACHINERY.	SCREENS	SEQ. 1/18X14SLOT,12X12WW	FAIR				THIS MATERIAL CONTAINED CYLINDRICAL SHAPED INERT MATERIAL. SCREE	
				INERT		PEICES OF RECEPTICLE		PNEUMATIC	SDB	GOOD					
				INERT		PEICES OF RECEPTICLE		VIBRATORY	SANDBLASTED DECK	BEST					
154	GOSSYPIUM		COTTON	XANTHIUM		COCKLEBUR	REMOVE COCKLEBURS, STICKS AND STEMS FROM DELINTED COTTON SEED.	INDENT CYLINDER	15/32"DIAMX13/64" POCKET	GOOD				THE GRAVITY TABLE AND ELECTROSTATIC SEPARATOR WERE ALSO TRIED AND FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.	A LENGTH SEPARATOR WILL WORK COMMERCIALLY ON SEPARATING COCKLEBUR FROM DELINTED COTTONSEED. THE MORE DELINTED IT
				XANTHIUM		COCKLEBUR		PNEUMATIC		POOR					
				XANTHIUM		COCKLEBUR		SCREEN	#15 SCREEN	FAIR		80			
				XANTHIUM		COCKLEBUR		INDENT DISC	SS SIZE DISC	FAIR					
343	GOSSYPIUM		COTTON	XANTHIUM		COCKLEBUR	REMOVE COCKLEBURS	GRAVITY	SEQ.	GOOD		100	100		USING THE ABOVE SEQUENCE, GRAVITY/PNEUMATIC/#15 RH/11/64 SLOT, 95.7% OF THE COTTON SEED WAS RECOVERED FREE OF COCKLEBURS.
				XANTHIUM		COCKLEBUR		PNEUMATIC	SEQ.REJECT FROM GRAVITY	GOOD					
				XANTHIUM		COCKLEBUR		SCREEN	SEQ.#15, LIFTED BY PNEUMATIC	GOOD					
				XANTHIUM		COCKLEBUR		SCREEN	SEQ.11/64, FRACT THRU #15	GOOD		100	100		
186	GOSSYPIUM		COTTON				RUN FLAME-DELINTED COTTON SEED ON ELECTROSTATIC SEPARATOR TO MAKE COMPARATIVE EVALUATIONS OF PERFORMANCE WITH THE ELECTRODE IN PINNING, LIFTING AND COMBINATION POSITIONS.								SAMPLES SENT TO SUBMITTER FOR EVALUATION.
326	GOSSYPIUM		COTTON				PERFORM EOECTROSTATIC SEPARATION ON 3 COTTON SEED LOTS TO IMPROVE GERMINATION.								FRACTIONS WERE SENT TO SUBMITTER FOR GERMINATION TRIALS.
571	GOSSYPIUM		COTTON				CLEAN SEED	OTHER	SEQ.VERTICAL SCREEN						FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.
1018	GYPSOPHILA	ROSA	BABYS BREATH					SCREEN	SEQ.						
932	HELIANTHUS	ANNUA	SUNFLOWER				WHAT EQUIPMENT CAN BE USED FOR CONDITIONING CONFECTIONERS SUNFLOWER SEED?								MACHINES THAT MAY BE USED TO CONDITION SUNFLOWER SEED ARE BRUSH AND BELT TYPE THRESHERS, SCREENS, AIR SEPARATOR, GRAVITY SEPARATOR AND PRECISION GRADER.
1221	HELIANTHUS	ANNUA	SUNFLOWER				REQUEST FOR INFORMATION CONCERNING FRICTION SEPARATOR MANUFACTURERS FOR REMOVAL OF INERT MATERIAL FROM SUNFLOWER.							DISCUSSION OF FRICTION SEPARATOR PRINCIPLES OF OPERATION AND MANUFACTURERS TOOK PLACE. CLIENT IS LOOKING FOR EXISTING FRICTION SEPARATORS AND SOME INDICATION OF THIER PERFORMANCE.	
741	HELIANTHUS	ANNUUS	SUNFLOWER	INERT		INERT	REMOVE CHIPPED AND CRACKED SEED COATS FROM UNDAMAGED SEED	FRICTION	BELT: CARPET, 3 PASSES	GOOD		87		MAGNETIC, PNEUMATIC AND OTHER MACHINES PROVED INEFFECTIVE FOR THIS SEPARATION.	CHIPPED SUNFLOWER SEED MAY BE MOST EFFECTIVELY REMOVED FROM UNDAMAGED SEED BY FRICTION SEPARATOR WITH CARPET ON BELT.
1190	HELIANTHUS	ANNUUS	SUNFLOWER	INERT		INERT	REMOVE INERT FROM SEED ALREADY 99.8% PURE	FRICTION	CARPET BELT SCOTCH BRITE BAR	GOOD	100	100	100	THIS WAS EDIBLE SEED FOR CONFECTIONARY USE. THEIR CONDITIONING RATE WAS APPROX 10000 LB HOUR. MOST OF THE INERT MATERIAL WAS PIECES OF THE RECEPTICLE.	
720	HELIANTHUS		SUNFLOWER	INERT		INERT	REMOVE INERT PLANT PARTS.	FRICTION	BRUSH BAR, CARPET BELT, 4 PASSES	GOOD			100		FOUR PASSES ON THE FRICTION SEPARATOR DID AN EXCELLENT JOB OF REMOVING INERT PLANT PARTS FROM THE SUNFLOWER SEED.
763	HELIANTHUS		SUNFLOWER	INERT		PLANT PARTS	REMOVE INERT PLANT PARTS AND CRACKED SEED	FRICTION	4' WIDE, SCOTCH BRITE BAR, 10 DEGREE BAR ANGLE, SPEED=200FPM	GOOD	99	92	100	CROP LOSS CAN BE KEPT TO A MINIMUM BY RERUNNING TO SALVAGE GOOD SEED.	THE FRICTION SEPARATOR REMOVED NEARLY ALL INERT PLANT PARTS AND 1/3 OF THE CRACKED SEED.
				INERT		PLANT PARTS AND CRACKED SEED		FRICTION	SAME	FAIR	95	32	97		

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
47	HELIANTHUS		SUNFLOWER	N/A		N/A	DETERMINE METHOD OF MAKING EFFECTIVE SIZE SEPARATION AT GOOD CAPACITY. THREE SIZE FRACTION DESIRED ARE: OVER #20, OVER #18, THROUGH #18 ROUND HOLE SCREENS.	AIR-SCREEN	#20 OVER #18 ROUND-HOLE					A SAMPLE OF KNOWN SIZE FRACTIONS WAS SENT THROUGH THE LAB CLIPPER AT 440RPM, CONSTANT FEED, DIFFERENT DAMS, AND DIFFERENT STROKES.	BEST RESULTS WERE OBTAINED WITH 1/4" DAMS (DAMS WERE VERY HELPFUL IN PRODUCING MORE ACCURATE SIZE SEPARATIONS) AND STROKE SETTINGS OF 5/8" AND 3/8" (AS LONG AS THE SCREENS WERE FITTED WITH DAMS). 1/8" STROKE WAS ENTIRELY UNSATISFACTORY.
296	HELIANTHUS		SUNFLOWER	XANTHIUM		COCKLEBUR	REMOVE COCKLEBUR	VELVET ROLL		GOOD	98	100	100	IT WAS FOUND THAT COCKLEBURS ADHERE TENACIOUSLY TO POLYURETHANE FOAM WHEN SUBJECTED TO LIGHT PRESSURE AGAINST THE FOAM. A SIMPLE MACHINE COULD POSSIBLY BE DEVELOPED EXPLOITING THIS FACT.	THE VELVET ROLL DID AN EXCELLENT JOB OF THIS SEPARATION. THE 1% LOSS OF CROP COULD BE REDUCED EVEN MORE WITH FURTHER ADJUSTMENT AND IMPROVED FEEDING.
				XANTHIUM		COCKLEBUR		PNEUMATIC		POOR					
				XANTHIUM		COCKLEBUR		VIBRATORY		POOR					
				XANTHIUM		COCKLEBUR		DRAPER		POOR					
468	HELIANTHUS		SUNFLOWER	XANTHIUM		COCKLEBUR	REMOVE BATHURST BURR	VELVET ROLL		FAIR		100	100	VIBRATOR, ELECTROSTATIC, DRAPER, INCLINED CHUTE, BOUNCE PLATE, SPIRAL, SCREENS AND MAGNETIC WERE INEFFECTIVE.	THE COLOR SORTER PERFORMED THE BEST, REMOVING NEARLY ALL BURS WITH SMALL CROP LOSS.
				XANTHIUM		COCKLEBUR		COLOR SORTER		GOOD					
179	HOLCUS	LANATUS	VELVETGRASS	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL AND FIDDLENECK	INDENT CYLINDER	SEVERAL SIZES	POOR					BASED ON SEED MEASUREMENT
				RUMEX	ACETOSELLA	SHEEP SORREL		INDENT DISC		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		SCREEN	.032"DIAM HOLES	FAIR	82		98		
				AMSINCKIA		FIDDLENECK		INDENT CYLINDER		POOR					
				AMSINCKIA		FIDDLENECK		INDENT DISC		POOR					
313	HOLCUS	LANATUS	VELVETGRASS	AMSINCKIA		FIDDLENECK	REMOVE WEEDS INCLUDING FINE FESCUE, SHEEPSORREL, CATCHFLY, BUCKHORN, ETC.	SCREENS	.032" HOLES	FAIR	82		98		THE VIBRATOR DID THE BEST RECOVERING 89% OF THE ORIGINAL AT 99.9% PURITY. THE 1/24 OVER 6X34 SCREENS YIELDED 84% AT 99.4% PURITY AND THE INDENT CYLINDER YIELDED 67% AT 99.6% PURITY.
				WEEDS		WEEDS		SCREENS	1/24 OVER 6X34	GOOD			99		
				WEEDS		WEEDS		INDENT CYLINDER	1/16"X.025" CYLINDER	FAIR			100		
213	HORDEUM	VULGARE	BARLEY	AVENA	FATUA	WILD OAT	REMOVE WILD OATS	INDENT CYLINDER	SEQ..45"DIAX.109"DEEP POCKETS	GOOD				THE INDENT WOULD HAVE DONE BETTER WITH A .4" DIAMETER POCKET.	THE INDENT/PNEUMATIC/SCREENING SEQUENCE YIELDED A 100% PURE BARLEY FRACTION. THE FRACTION HELD ON THE #8 SCREEN WAS TOTALLY PURE AS WAS THE FRACTION HELD ON THE 5-1/2X3/4 SLOTTED SCREEN.
				AVENA	FATUA	WILD OAT		PNEUMATIC	SEQ.LIFTED FRACT. FROM INDENT	GOOD					
				AVENA	FATUA	WILD OAT		SCREEN	SEQ.#8 RD-HOLE, DROPPED FRACT. FROM BLOWER	GOOD					
				AVENA	FATUA	WILD OAT		SCREEN	SEQ.5-1/2X3/4 SLOT,DROPPED FRACT. FROM #8	GOOD		100	100		
335	HORDEUM	VULGARE	BARLEY	HORDEUM	VULGARE	BARLEY	SEPARATE DIFFERENT VARIETIES OF BARLEY THAT VARY SLIGHTLY IN COLOR.	COLOR SORTER		POOR					TRIALS WERE UNSUCCESSFUL.
				HORDEUM	VULGARE	BARLEY		ELECTROSTATIC		POOR					
1150	HORDEUM	VULGARE	MALTED BARLEY	HORDEUM	VULGARE	MALTED BARLEY	REMOVE ROOTS FROM MALTED BARLEY	POOR	LAH W/20X20 WW MANTLE	GOOD				THIS WAS A LOT OF MALTED BARLEY THAT REQUIRED REMOVAL OF THE DRIED RO	
249	HORDEUM	VULGARE	BARLEY	TRITICUM		WHEAT	REMOVE WHEAT.	SCREENS	7/64X3/4 SLOT OVER #8-1/2RH	FAIR	50	100	100	THE SCREENING TRIALS WERE DONE WITH AN ARTIFICIAL MIXTURE WHICH WAS 50% BARLEY AND 50% WHEAT. THE INDENT TRIAL WAS DONE WITH THE ORIGINAL SAMPLE.	BOTH THE SCREENS AND THE INDENT CYLINDER DID FAIRLY WELL, BUT CROP LOSS WAS HIGH. SCREENS REMOVED ALL THE WHEAT IN AN ARTIFICIAL SAMPLE WHICH WAS 50% PURE AND, USING THE ORIGINAL SAMPLE, THE .28"DIA X .08"DEEP INDENT REDUCED WHEAT TO 14/LB.
				TRITICUM		WHEAT		INDENT CYLINDER	.28"DIAX.08"DEEP POCKETS	FAIR	98				
410	HORDEUM	VULGARE	BARLEY				SEPARATE BLUE AND AMBER HULL-LESS BARLEY WITH COLOR SORTER.								AFTER FIVE PASSES THROUGH THE COLOR SORTER, AN ACCEPTABLE SEPARATION WAS MADE.
214	HORDEUM	VULGARE BETZES	BARLEY	AVENA	FATUA	WILD OATS	REMOVE WILD OATS								NO SEPARATION TRIALS PERFORMED, BUT THE SEQUENCE USED IN PS #213 FOR BARLEY WITH WILD OATS WOULD BE EFFECTIVE. SOME MODIFICATION IN SIZE OF INDENT CYLINDER OR THE ROUND-HOLE SCREEN MIGHT BE NECCESSARY BECAUSE OF THE DIFFERENT SIZES OF BARLEY SEED.

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
215	HORDEUM	VULGARE COMPANA	BARLEY	AVENA	FATUA	WILD OATS	REMOVE WILD OATS								NO SEPARATION TRIALS PERFORMED, BUT THE SEQUENCE USED IN PS #213 FOR BARLEY WITH WILD OATS SHOULD B EFFECTIVE. SOME MODIFICATION IN SIZE OF INDENT CYLINDER OR THE ROUND-HOLE SCREEN MIGHT BE NECCESSARY BECAUSE OF THE DIFFERENT SIZES OF THE BARLEY SEED.
802	HUMULUS	LUPULUS	HOPS	INERT		INERT	REMOVE HOP CONE MATERIAL: BRACTS, STEMS AND STRIG. HAD BEEN THROUGH A THRESHER.	AIR-SCREEN	#9 RD HOLE TOP SCR., #6 RD HOLE BOTTOM SCR., AIR SETTING: 50.	GOOD				A QUICK SCREENING RESULTED IN MORE CROP LOSS BUT A CLEANER PROCUCT BECAUSE STICKS DID NOT HAVE AS MUCH TIME TO WORK THROUGH THE SCREEN AS COMPARED TO A LONGER SCREENING TIME.	A SATISFACTORY SEPARATION OF HOP CONE MATERIAL TO YIELD PURE SEED CAN BE MADE ON AN AIR-SCREEN MACHINE.
961	IMPATIENS		IMPATIENS	INERT		INERT	REMOVE CONTAMINANTS FROM SEED.	SCREENS						THIS SEED LOT HAD ALREADY BEEN CONDITIONED.	ROUND-HOLE SCREEN SIZES RANGING FROM .056 TO .033 WOULD DIVIDE THE SEED INTO WIDTH FRACTIONS. WOVEN WIRE SCREENS RANGING FR
				INERT		INERT		PNEUMATIC							
				INERT		INERT		GRAVITY							
825	JUGLANS		WALNUT	SHELLS		SHELLS	REMOVE SHELLS FROM MEATS USING MAGNETIC SEPARATOR.	MAGNETIC	VARIOUS LEVELS MAG. FLUID						ALL FRACTIONS SENT TO SUBMITTER.
1260	KOHLERIA	CRISTATA													
698	LACTUCA	SATIVA	LETTUCE	DIGITARIA		CRABGRASS	REMOVE CRABGRASS	INDENT CYLINDER	#7 CYLINDER	GOOD	99	100	100	PNEUMATIC, FRICTION, BOUNCE PLATE, VELVET ROLL AND VIBRATOR WERE INEFFECTIVE.	THE INDENT CYLINDER, SCREEN, AND AIR-SCREEN YIELDED BEST RESULTS WITH THE INDENT CYLINDER GIVING A 100% PURE PRODUCT WITH A .83% LOSS.
				DIGITARIA		CRABGRASS		SCREEN	1/22 ROUND HOLE	GOOD	99		100		
				DIGITARIA		CRABGRASS		AIR-SCREEN	1/22 ROUND HOLE	GOOD	99		100		
480	LACTUCA	SATIVA	LETTUCE	INERT		INERT	REMOVE INERT MATERIAL	VIBRATORY	SMOOTH, FORMICA-LIKE DECK	FAIR				ELECTROSTATIC, VELVET ROLL AND INDENT CYLINDER WERE UNSUCCESSFUL IN MAKING THIS SEPARATION.	THE VIBRATOR SEPARATOR CAN REMOVE A LARGE PORTION OF THE TRASH BUT NOT ALL. A BETTER SEPARATION IS MADE BY BLOWING AND THEN SCREENING THE SAMPLE.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
				INERT		INERT		SCREENS	SEQ.4X26 OVER 22X22	GOOD					
362	LACTUCA	SATIVA	LETTUCE	LACTUCA	SATIVA	LETTUCE	SIZE LETTUCE SEED.	AIR-SCREEN	1/20 OVER 1/25 W/DAMS						THE AIR-SCREEN MACHINE WITH A 1/20 ROUND-HOLE TOP SCREEN AND A 1/25 ROUND-HOLE BOTTOM SCREEN IS RECOMMENDED FOR SIZING THIS LOT OF LETTUCE SEED. 84% OF THE SEED LOT WAS HELD ON THE 1/25 SCREEN.
1269	LACTUCA	SATIVA	LETTUCE	LACTUCA	SATIVIA	LIGHT LETTUCE	SEPARATE DARK LETTUCE SEED FROM LIGHT LETTUCE CONTAMINANT	COLOR SORTER	#23 FILTER, BLACK BACKGROUNDS	GOOD	95	90	99	THIS SAMPLE REPRESENTS 90 LBS OF MIXED LIGHT AND DARK LETTUCE SEED. EST	
177	LACTUCA	SATIVA	LETTUCE	SETARIA		BRISTLEGRASS	REMOVE BRISTLEGRASS	SCREENS	6X25 OVER 6X26 OVER 6X28	GOOD		95			BEST RESULTS WITH 6X25-OVER-6X26-OVER 6X28 STACK OF SCREENS. 85% OF SETARIA REMOVED WITH 11% SHRINKAGE.
				SETARIA		BRISTLEGRASS		VELVET ROLL		POOR					
				SETARIA		BRISTLEGRASS		ELECTROSTATIC		POOR					
				SETARIA		BRISTLEGRASS		VIBRATORY		POOR					
				SETARIA		BRISTLEGRASS		SPIRAL		POOR					
				SETARIA		BRISTLEGRASS		MAGNETIC		POOR					
608	LACTUCA	SATIVA	LETTUCE				SIZE-GRADE FOR QUALITY EVALUATION.	SCREEN	SEQ. 1/22 ROUND-HOLE						THE SAMPLES WERE SCREENED, THEN GRADED FURTHER ON THE GRAVITY TABLE. FRACTIONS TAKEN BY SUBMITTER FOR EVALUATION.
								GRAVITY	SEQ.						
621	LACTUCA	SATIVA	LETTUCE				GRADING FOR QUALITY EVALUATION.	OTHER	SEQ 1/21 RD HOLE, SHAKER					SIMILAR TO #608, BUT WITH VANGARD VARIETY.	SIZE-GRADED FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.
								GRAVITY	SEQ						
804	LARIX	LARICINA	TAMARACK	INERT		INERT	REMOVE INERT MATERIAL (STICKS, PITCH AND CONE PARTS) FROM ALREADY CLEANED AND DEWINGED SAMPLE.	PNEUMATIC	SEQ.AIR SPEED: 700 FPM	GOOD				THE FRICTION SEPARATOR,WHICH WORKS WELL WITH MOST CONIFER SEEDS, DID NOT WORK AS WELL WITH TAMARACK BECAUSE OF THE SMALL SIZE OF THE SEED.	TAMARACK CAN BE CLEANED TO 99% PURITY USING THE ABOVE SEQUENCE, BUT SEED LOSS WOULD BE LARGE UNLESS CAREFUL RECLAIMING OF FRACTIONS IS DONE.
				INERT		INERT		INDENT CYLINDER	#8 INDENT CYLINDER	GOOD					
				INERT		INERT		SCREEN	1/13 ROUND HOLE SCREEN	GOOD		66	99		
1132	LARIX	OCCIDENTALIS	WESTERN LARCH	INERT		PITCH AND PLANT PARTS		SCREEN	6X16 WW	FAIR		50		THIS WAS A TYPICAL SMALL LOT OF LARCH. MAIN PROBLEM WAS THE PITCH. ELECTROSTATIC AND VIBRATORY DID A GOOD JOB OF REMOVING PITCH.	USE VIBRATORY SEPARATOR WITH SANDBLASTED METAL DECK TO REMOVE INERT MATERIAL FROM LARCH SEED. SECOND CHOICE WOULD BE ELECTORSTATIC SEPARATOR.
				INERT		PITCH AND PLANT		VIBRATORY	SANDBLASTED DECK	GOOD	75	90	95		
				INERT		PITCH AND PLANT PARTS		ELECTROSTATIC	PINNING ELECTRODE POSITION	GOOD	75	75	90		
1209	LARIX	OCCIDENTALIS	WESTERN LARCH	INERT		PITCH	REMOVE PITCH PARTICLES	VIBRATORY	TWO DECKS:CANVAS THEN SANDBLASTED ALUMINUM AND 1/13 RH SCREEN	GOOD	75	90	98	THIS MATERIAL HAS BEEN CLEANED WITH SCREENS, PNEUMATIC AND SOMETIMES GRAVITY. REMOVAL OF ALL P	
				INERT		PITCH		FRICTION	RUBBER BAR AND CARPET BELT	FAIR					
				INERT		PITCH		ELECTROSTATIC		POOR					
				INERT		PITCH		MAGNETIC		FAIR					

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103	LATHYRUS	ODORATUS	SWEET PEA	LATHYRUS	ODORATUS	SWEET PEA	REMOVE SEEDS WITH CRACKED COATS FROM THOSE WITHOUT CRACKED COATS.	PNEUMATIC		GOOD	75	85	95		ONLY THE PNEUMATIC SEPARATOR WAS ABLE TO MAKE THIS SEPARATION, RECOVERING ABOUT 80% OF THE GOOD SEED AT 95% PURITY.
				LATHYRUS	ODORATUS	SWEET PEA		VELVET ROLL		POOR					
				LATHYRUS	ODORATUS	SWEET PEA		MAGNETIC		POOR					
				LATHYRUS	ODORATUS	SWEET PEA		DRAPER	CANVAS BELT	POOR					
				LATHYRUS	ODORATUS	SWEET PEA		VIBRATORY		POOR					
241	LENS	CULINARIS	LENTIL	HORDEUM	VULGARE	BARLEY	REMOVE BARLEY	SCREEN	#11 ROUND-HOLE	GOOD		100	100		USE A #11 ROUND-HOLE SCREEN WITH DAMS.
				HORDEUM	VULGARE	BARLEY		SCREEN	VARIOUS SLOTTED SCREENS	POOR					
533	LENS	CULINARIS	LENTIL	HORDEUM	VULGARE	BARLEY	REMOVE BARLEY.	AIR-SCREEN	11/64 ROUND-HOLE SCREEN	GOOD					AN ALMOST PERFECT SEPARATION MAY BE MADE WITH AN 11/64 SCREEN IF T
151	LENS	CULINARIS	LENTIL				DETERMINE DAMAGE TO LENTILS DUE TO HANDLING BY THE USDA FLUIDIZED CONVEYOR. THE CONVEYOR CONSISTS OF A 56' RUN OF 1-1/2"ALUMINUM TUBING.							DENSE PHASE F	THIS LOT CAN BE TRANSPORTED READILY WITH LITTLE OR NO BREAKAGE. MOST OF THE BREAKAGE OBSERVED WAS DUE TO THE AIR-LOCK AND COULD BE REDUCED OR ELIMINATED WITH A DROP-THROUGH LOCK WITH FLEXIBLE BLADE TIPS AND A WIPER AT THE FEED INLET.
473	LENS	CULINARIS	LENTIL				DETERMINE DAMAGE TO LENTILS DURING FLUIDIZED CONVEYING.							TEST RUN WITH BLOWER SPEED OF 860 RPM, AIR PRESSURE AT 3-5 PSIG AND AUX AIR VALVE OPEN 1 1/2 TURNS.	IN THE TESTS, THERE WAS NO APPARENT DAMAGE TO THE LENTILS.
180	LESPEDEZA	SERICEA	SERICEA LESPEDEZA	LESPEDEZA	SERICEA	SERICEA LESPEDEZA	SEPARATE SELF-POLLINATED SEED FROM OPEN-POLLINATED SEED.	INDENT CYLINDER	#4 CYLINDER, 45 MINUTES	FAIR					ONLY THE #7 INDENT CYLINDER WAS ABLE YIELD FRACTIONS APPROACHING THE DESIRED SEPARATION.
				LESPEDEZA	SERICEA	SERICEA LESPEDEZA		VIBRATORY		POOR					
				LESPEDEZA	SERICEA	SERICEA LESPEDEZA		PNEUMATIC		POOR					
				LESPEDEZA	SERICEA	SERICEA LESPEDEZA		SCREENS	ROUND HOLE, WIRE MESH	POOR					
172	LESPEDEZA	STIPULACEA	KOREAN LESPEDEZA	CUSCUTA		DODDER	REDUCE GIANT FOXTAIL TO 100/LB AND DODDER TO 100/LB. 6840 FOXTAIL/LB AND 972 DODDER/LB PRESENT.	DRAPER	SEQ.A.	GOOD					THE DODDER CAN BE FAIRLY EASILY REMOVED USING THE DRAPER FOLLOWED BY THE VELVET ROLL. THE FOXTAIL COULD NOT BE REDUCED TO THE ALLOWABLE LIMIT USING ANY OF THE EQUIPMENT.
				CUSCUTA		DODDER		VELVET ROLL	SEQ.A.	GOOD					
				SETARIA	FABERI	GIANT FOXTAIL		PNEUMATIC		POOR					
				SETARIA	FABERI	GIANT FOXTAIL		VELVET ROLL		POOR					
				SETARIA	FABERI	GIANT FOXTAIL		OTHER	CATAPULT	POOR					
				SETARIA	FABERI	GIANT FOXTAIL		SCREENS		POOR					
				SETARIA	FABERI	GIANT FOXTAIL		ELECTROSTATIC		POOR					
				SETARIA	FABERI	GIANT FOXTAIL		INDENT CYLINDER		POOR					
228	LESPEDEZA		LESPEDEZA	ALOPECURUS		FOXTAIL	REMOVE FOXTAIL.	SCREENS	1/17 OVER 1/18 RD HOLE						ACCORDING TO SEED MEASUREMENTS, A .057" DIAM ROUND HOLE SCREEN SHOULD RETAIN 75% OF THE CROP WITH ONLY 5% OF THE FOXTAIL. A 1/17 ROUN
1033	LIATRIS		LIATRIS	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC		FAIR				FORMERLY UNDER SAMPLE #736	
871	LIMNANTHES	ALBA	MEADOWFOAM	INERT		INERT	CONDITION SEED.	BELT THRESHER	SEQ.						THE BELT THRESHER AND AIR-SCREEN MACHINE WITH A #6 SCREEN OVER A 1/20 SCREEN WERE USED TO CONDITION MEADOWFOAM SEED.
				INERT		INERT		AIR-SCREEN	SEQ.#6 OVER 1/20 SCREEN						
595	LIMNANTHES	ALBA	MEADOWFOAM	TRITICUM		WHEAT	REMOVE WHEAT AND OTHER CONTAMINANTS	SCREEN	SEQ. 7 1/4 ROUND-HOLE						SCREENS, AIR COLUMN, VIBRATOR, VELVET ROLLS, FRICTION, DRAPER, AND INDENT CYLINDER WERE TRIED, BUT THE BEST PROCEDURE WAS A SEQUENCE OF SCREEN, AIR COLUMN AND INDENT CYLINDER. THIS YIELDED A FINAL PURITY OF 99.7% WITH 14.2% CROP LOSS.
575	LIMNANTHES	ALBA	MEADOWFOAM					PNEUMATIC	SEQ.						
714	LIMNANTHES	ALBA	MEADOWFOAM					INDENT CYLINDER	SEQ. #10 CYLINDER	GOOD			100		
1036	LINARIA	VULGARIS	YELLOW TOADFLAX	INERT		INERT	REMOVE INERT MATERIAL	VIBRATORY		GOOD				FORMERLY UNDER SAMPLE #736	
144	LINUM	USITATISSIMUM	FLAX	STEMS		STEMS	REMOVE STEMS	SCREEN	SEQ 1.4X18	GOOD					BEST RESULTS ON A SINGLE PASS BASIS WERE WITH THE VELVET ROLLS AND PNEUMATIC SEPARATOR. SCREENING WITH VELVET ROLLS AND BLOWING WITH SCREENING YIELDED EVEN BETTER RESULTS.
				STEMS		STEMS		VELVET ROLL	SEQ 1.	GOOD	85	100	100		
				STEMS		STEMS		PNEUMATIC	SEQ 2.ESM-2 BLOWINGS	FAIR					
				STEMS		STEMS		SCREEN	SEQ 2.4X20	FAIR	85	100	100		
				STEMS		STEMS		VELVET ROLL			85	96	99		
				STEMS		STEMS		PNEUMATIC	ESM		85				
1159	LINUM		WILD FLAX	LINUM		FIELD RUN WILD FLAX		SCREENS	SEQ 4X22 WW TOP					WILD FLAX WAS SCREENED TO DETERMINE APPROXIMATE SCREEN SIZES FOR CLEANING.	
				LINUM		FIELD RUN WILD FLAX		SCREENS	SEQ 5-1/2 TO 6 RH BOTTOM						
371	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	AVENA	FATUA	WILD OATS	REMOVE WILD OATS, TRASH AND OTHER WEED SEEDS.	SCREEN	SEQ.4X16 SLOT						A 4X16 SLOTTED SCREEN OVER A 1/19 ROUND-HOLE WAS USED TO REMOVE WILD OATS, TRASH AND SMALL WEED SEEDS. THEN A #5 INDENT CYLINDER LIFTED SHORT WEED SEEDS.

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				TRASH		TRASH		SCREEN	SEQ.4X16 SLOT						
				WEEDS		WEEDS		SCREEN	SEQ.1/19 ROUND-HOLE						
				TRASH		TRASH		SCREEN	SEQ.1/19 ROUND-HOLE						
				WEEDS		SHORT WEEDS		INDENT CYLINDER	SEQ.#5 CYLINDER						
663	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	AVENA	FATUA	WILD OATS	REMOVE WILD OATS	SCREEN	1/24X1/2 SLOTTED-HOLE						PURITY EVALUATIONS WERE NOT MADE BUT THE 1/24X1/2 SLOTTED SCREEN AND 4X20 WIRE MESH SCREEN SEEMED TO BE EFFECTIVE IN REMOVING THE OATS. ROUND-HOLE SCREEN TRIALS WERE UNSATISFACTORY.
				AVENA	FATUA	WILD OATS		SCREEN	4X20 WIRE MESH						
279	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	BROMUS	COMUTATUS	HAIRY CHESS	REMOVE HAIRY CHESS	SCREEN	1/24X1/2	GOOD		100	100		A 1/24X1/2 SCREEN RECOVERS 84% OF THE LOT AS PURE RYEGRASS OR A 4X18 SCREEN RECOVERS 93% OF THE LOT WITH A SMALL AMOUNT OF CHESS STILL IN THE CLEAN SAMPLE.
				BROMUS	COMUTATUS	HAIRY CHESS		SCREEN	4X18	GOOD					
1085	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	GLYCERIA	FLUTIANS	WATER MANNAGRASS	REMOVE MANNAGRASS	GRAVITY	450RPM CLOTH DECK	BEST	80	99	99	THIS MATERIAL WAS THE LIFTED FRACTION OF AN INDENT DISK	TO REMOVE MANNAGRASS FROM ANNUAL RYEGRASS USE GRAVITY SEPARATOR
				GLYCERIA	FLUTIANS	WATER MANNAGRASS		VELVET ROLL	300RPM	FAIR	80	90	95		
1194	LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS	GLYCERIA	FLUTIANS	MANNAGRASS	REMOVE MANNAGRASS							THIS WAS A LOT WITH 4% MANNAGRASS. ADVICE WAS GIVEN BASED ON PS 1085. USE OF INDENT DISK AND GRAVITY WAS RECOMMENDED.	
699	LOLIUM	MULTIFLORUM	GULF ANNUAL RYEGRASS	MISC		MISC	REMOVE WEED SEED (RATTAIL FESCUE, VELVET GRASS, AND UNIDENTIFIED SEED) AND INERT MATERIAL USING AIR-SCREEN MACHINE.	AIR-SCREEN	HIGH AIR VELOCITY, 2 PASSES	FAIR	87		100	BOTH TRIALS WERE WITH #6 1/2 RD HOLE TOP SCREEN AND #1/20 RD HOLE BOTTOM SCREEN.	THE AIR SCREEN MET THE PURITY REQUIREMENTS, BUT WITH LARGE CROP LOSS.
				MISC		MISC		AIR-SCREEN	2 PASSES, MEDIUM THEN NO AIR	FAIR	87		98		
1230	LOLIUM	PERENNE	SR4100 PERENNIAL RYEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	INDENT CYLINDER	5.00MM POCKET					THIS SAMPLE REPRESENTED 55000 LBS OF CERTIFIED S	
782	LOLIUM	PERENNE	PERENNIAL RYEGRASS	ALOPECURUS		FOXTAIL	REMOVE FOXTAIL	PNEUMATIC	ESM	GOOD		94			BEST RESULTS WERE HAD WITH THE BLOWER. A 1/16 ROUND-HOLE SCREEN DID FAIRLY WELL, BUT CROP LOSS WAS HIGHER.
				ALOPECURUS		FOXTAIL		SCREEN	1/16 ROUND-HOLE	FAIR		98			
590	LOLIUM	PERENNE	PERENNIAL RYEGRASS	ANTHOXANTHUM	ODORATUM	SWEET VERNALGRASS	REMOVE SWEET VERNALGRASS	VIBRATORY	SANDBLASTED DECK	GOOD				TRIALS WITH THE AIR COLUMN AND VELVET ROLLS WERE INEFFECTIVE.	THE VIBRATOR SEPARATOR WORKED VERY WELL ON THIS SEPARATION. THE GRAVITY TABLE WITH CLOTH DECK SHOWED SOME POTENTIAL, BUT THE LOT WAS TOO SMALL TO COMPLETELY EVALUATE THIS METHOD.
617	LOLIUM	PERENNE	PERENNIAL RYEGRASS	ANTHRISCUS	SCANDICINA	BUR CHERVIL	REMOVE BUR CHERVIL	SCREEN		POOR					EXCELLENT RESULTS WERE OBTAINED WITH R5 AND R5 1/2 INDENT DISKS.
								FRICTION		FAIR					
								INDENT DISC	R5 OR R5 1/2 DISK	GOOD	99		100		
536	LOLIUM	PERENNE	PERENNIAL RYEGRASS	BROMUS	SECALINUS	CHESS	REMOVE CHESS.	AIR-SCREEN	SEQ.7 1/2 RD OVER 4X18 OVER 20X20						THE ABOVE PROCEDURE WAS RECOMMENDED TO SUBMITTER BASED ON EQUIPMENT HE HAD. MATERIAL HELD ON THE 20X20 WIRE MESH SCREEN WOULD GO TO THE INDENT DISC.
				BROMUS	SECALINUS	CHESS		INDENT DISC	SEQ.R-6 OR M DISC						
486	LOLIUM	PERENNE	PERENNIAL RYEGRASS	FESTUCA	ARUNDINACEA	TALL FESCUE	REMOVE ORCHARDGRASS AND TALL FESCUE	SCREEN	1/22 ROUND HOLE	POOR					IT WAS TOO DIFFICULT TO DISTINGUISH THE CONTAMINANT SEEDS FROM THE SMALL RYEGRASS TO EVALUATE THE TEST. ONLY TWO CONTAMINANT SEEDS (ONE OF EACH TYPE) WERE IN THE SAMPLE TESTED.
				DACTYLIS	GLOMERATA	ORCHARDGRASS									
574	LOLIUM	PERENNE	PERENNIAL RYEGRASS	FESTUCA		FINE FESCUE	REMOVE FINE FESCUE								BASED ON PAST REPORTS, SCEENS (1/20 ROUND-HOLE, 6X21 SLOT AND 18X18 SQUARE-HOLE) WERE RECOMMENDED TO THE SUBMITTER
1184	LOLIUM	PERENNE	PERENNIAL RYEGRASS	FESTUCA	RUBRA	FINE FESCUE	REMOVE FINE FESCUE	SCREEN	6X24 WW		95			THIS WAS MATERIAL THAT WAS ACCIDENTALLY MIXED. IT CONTAINED 5.5% FINE FESCUE BY WEIGHT. SUBMITTER NEEDED 0.5%. SCREENS WERE TESTED AND RESULTS WILL BE FORWARDED.	
				FESTUCA	RUBRA	FINE FESCUE		SCREEN	22X22 WW		95				
746	LOLIUM	PERENNE	PERENNIAL RYEGRASS	INERT		INERT	REMOVE INERT MATERIAL: MUD CLODS, ROCKS, PLANT MATERIAL, ETC.	AIR-SCREEN	SEQ. 1/22X1/2 TOP SCREEN, 1/22" RD HOLE BOTTOM SCREEN	GOOD	84	64	94	SAMPLE WAS REJECT MATERIAL FROM AN AIR-SCREEN/INDENT DISK CLEANING SEQUENCE PERFORMED BY PROCESSOR.	FINAL RYEGRASS PURITY WAS 99% WITH A CROP LOSS OF 9.9% FOR THE ENTIRE SEQUENCE.
				INERT		INERT		INDENT CYLINDER	SEQ. #7 INDENT CYL.	GOOD	94	84	99		
750	LOLIUM	PERENNE	FINELEAF PERENNIAL RYEGRASS	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC		GOOD		90		SAMPLE HAD NOT PASSED CERTIFICATION.	SAMPLE COULD BE IMPROVED TO MEET CERTIFICATION REQUIREMENTS WITH ONLY PNEUMATIC SEPARATION AND CROP LOSS OF ABOUT .5%.
1027	LOLIUM	PERENNE	PERENNIAL RYEGRASS	INERT		CHAFF	REMOVE INERT MATERIAL	AIR-SCREEN	#6 TOP, 4X26 BOTTOM	GOOD	85	90	99	SEPARATION FOR A BREEDER LOT.	uSE AIR SCREEN TO REMOVE INERT (CHAFF AND STRAW).
1077	LOLIUM	PERENNE	PERENNIAL RYEGRASS	INERT		STRAW	REMOVE STRAW AND SOIL FROM VACUUM HARVESTED RYEGRASS	SEQUENCE	#16 RH,22X22 WW,#8 RH, 6X32 WW	GOOD	3.5			THIS WAS A SAMPLE OF RECLAIMED SEED THAT WAS VACUUM HARVESTED AFTER NORMAL WIN	USE SCREENS AIR AND INDENT TO REMOVE STRAW AND SOIL FROM RECLAIMED RYEGRASS SEED.

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
				INERT		SOIL		SEQUENCE	8MM INDENT, 2.75 MM INDENT,AIR	GOOD			71		
1248	LOLIUM	PERENNE	PERENNIAL RYEGRASS	INERT		STRAW	REMOVE SEED FORM VACUUMED STRAW FOR RESEARCH PURPOSES	SCREEN	SEQ 16/64RH, 8/64RH,4X30WW	GOOD				A SEQUENCE OF 16/64 AND 8/64RH SCALP	USE A SEQUENCE OF 16/64RH, 8/64RH, 4X30WW, AIR AND 8MM INDENT CYLINDER TO REMOVE STRAW FROM VACUUM HARVESTED RYEGRASS
				INERT		STRAW		PNEUMATIC	IN AIR SCREEN	GOOD					
				INERT		STRAW		INDENT CYLINDER	8MM TO LIFT CROP	GOOD					
161	LOLIUM	PERENNE	PERENNIAL RYEGRASS	LOLIUM		COMMON RYEGRASS	REMOVE COMMON RYEGRASS	VIBRATORY	3/4"-80 GRIT SANDPAPER	GOOD			100	LENGTH SEPARATION WAS NOT FEASIBLE BECAUSE OF IDENTICAL SEED DIMENSIONS.	THE VIBRATOR SEPARATOR DID A VERY GOOD SEPARATION YIELDING A 99.8% PURE SAMPLE WITH A SHRINKAGE OF 9% OF THE LOT.
				LOLIUM		COMMON RYEGRASS		PNEUMATIC		POOR					
				LOLIUM		COMMON RYEGRASS		ELECTROSTATIC		POOR					
591	LOLIUM	PERENNE	PERENNIAL RYEGRASS	LOLIUM	ANNUA	ANNUAL RYEGRASS	REMOVE ANNUAL RYEGRASS WITH ROUND HOLE SCREENS.	SCREEN	1/17 ROUND-HOLE	POOR				SUBMITTER HAD USED SLOTTED HOLE SCREENS, BUT WANTED TO FIND OUT IF ROUND HOLE SCREENS WOULD BE BETTER.	IT WAS CONCLUDED THAT THE SUBMITTER COULD DO A BETTER JOB WITH HIS SLOTTED HOLE SCREENS THAN MIGHT BE DONE WITH ROUND HOLE SCREENS.
747	LOLIUM	PERENNE	FINELEAF PERENNIAL RYEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	AIR-SCREEN	#8 ROUND TOP, 1/22 ROUND BOTTOM	GOOD				PRODUCT WAS RUN TWICE OVER THE AIR SCREEN.	
956	LOLIUM	PERENNE	PERENNIAL RYEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	INDENT CYLINDER	8/64 - 12/64	GOOD				INDNET CYLINDERS WITH 8/64 TO 12/64 POCKETS WILL REMOVE A VERY LARGE PERCENTAGE OF THE ANNUAL BLUEGRASS	USE INDENT CYLINDER WITH 8/64 - 12/64 POCKET
1124	LOLIUM	PERENNE	PERENNIAL RYEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	DETERMINE LENGTHS OF PERENNIAL RYEGRASS AND ANNUAL BLUEGRASS							SUBMITTER REQUESTED THAT WE MEASURE CROP AND CONTAMINANT SEEDS. TWENTY POA SEEDS WERE MEASURED WITH AN AVERAGE LENGTH OF .091". FIVE THOUSAND CROP SEEDS WERE MEASURED WITH AND AVERAGE LENGTH OF	
1126	LOLIUM	PERENNE	TURF TYPE PERENNIAL RYEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE POA ANNUA	INDENT CYLINDER	3.00MM					THIS WAS MATERIAL THAT REQUIRED RECLEANING BECAUSE OF POA ANNUA PRESENT. THE SUBMITTER WAS GOING TO PURCHASE NEW CYLINDERS AS A RESULT OF THESE TESTS. TWO TYPES OF MATERIAL WERE TESTED. T	
				POA	ANNUA	ANNUAL BLUEGRASS		INDENT CYLINDER	3.25MM						
				POA	ANNUA	ANNUAL BLUEGRASS		INDENT CYLINDER	3.50MM				54/LB		
				POA	ANNUA	ANNUAL BLUEGRASS		INDENT CYLINDER	3.75MM				27/LB		
				POA	ANNUA	ANNUAL BLUEGRASS		INDENT CYLINDER	4.00MM						
973	LOLIUM	PERENNE	PERENNIAL RYEGRASS	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE TO CERTIFIED QUALITY	SCREEN	4X32 WW	GOOD	98	66	100	NEEDS CERTIFICATION GRADE. ORIGINAL LOT IS 78KLBS WITH 1.6%	WOVEN WIRE SCREENS REMOVED A LARGE PERCENTAGE OF THE RATTAIL FESCUE WITH VARING LOSS. CONSIDERED BEST FOR THIS SEPARATION WAS THE 4X30 WW WITH THE HIGHEST REMOVAL OF VULPIA AND SECOND LOWEST LOSS.
				VULPIA	MYUROS	RATTAIL FESCUE		SCREEN	4X30 WW	BEST	98	95	100		
				VULPIA	MYUROS	RATTAIL FESCUE		SCREEN	4X28 WW		98	90	100		
				VULPIA	MYUROS	RATTAIL RESCUE		SCREEN	4X26 WW		98	95	100		
1188	LOLIUM	PERENNE	RYEGRASS												
838	LOLIUM	PRATENSE	ANNUAL RYEGRASS	FESTUCA	ARUNDINACEA	TALL FESCUE	REMOVE TALL FESCUE.	VELVET ROLL							NO RESULTS AVAILABLE.
8	LOLIUM		RYEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS.	INDENT CYLINDER	SPECIAL INDENT, .221"X.025"	POOR					A #R6 INDENT DISC GAVE THE BEST RESULTS, LIFTING 54% OF THE LOT WITH A PURITY OF 99.97%.
				AGROPYRON	REPENS	QUACKGRASS		INDENT DISC	#6R DISC	FAIR	98	90	100		
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		ELECTROSTATIC		POOR					
122	LOLIUM		RUSSIAN WILD RYEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	SCREEN	6X18		60	92	92	SEED MEASUREMENTS INDICATE THAT A .049" SLOTTED SCREEN SHOULD HOLD 45% OF THE	SCREENS ARE THE MOST EFFECTIVE SEPARATING DEVICE FOR THIS PROBLEM.
				AGROPYRON	REPENS	QUACKGRASS		SCREEN	6X16		60	100	100		
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		DRAPER		POOR					
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY		POOR					
				AGROPYRON	REPENS	QUACKGRASS		ELECTROSTATIC		POOR					
360	LOLIUM		PELO RYEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS	INDENT DISC	V6-1/2 DISC	GOOD		95			BEST RESULTS WERE WITH THE V6-1/2 INDENT DISC. AFTER TWO TRIALS, AN AVERAGE OF 84% OF THE LOT WAS SALVAGED WITH 95% OF THE QUACKGRASS REMOVED.
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY		POOR					
				AGROPYRON	REPENS	QUACKGRASS		ELECTROSTATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		OTHER	BOUNCE PLATE	POOR					
556	LOLIUM		RYEGRASS	ALOPECURUS	MYOSUROIDES	SLENDER FOXTAIL	REMOVE SLENDER FOXTAIL.	PNEUMATIC		GOOD		100	100		THE PNEUMATIC SEPARATOR DOES AN EXCELLENT JOB OF THIS SEPARATION. SIMILAR RESULTS MIGHT BE OBTAINED WITH CLOSE ADJUSTMENT OF THE AIR IN AN AIR-SCREEN MACHINE.
				ALOPECURUS	MYOSUROIDES	SLENDER FOXTAIL		OTHER	CHUTE SEPARATOR	FAIR		87			
				ALOPECURUS	MYOSUROIDES	SLENDER FOXTAIL		OTHER	BOUNCE PLATE	POOR		83			

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				ALOPECURUS	MYOSUROIDES	SLENDER FOXTAIL		SCREENS		POOR					
508	LOLIUM		MANHATTAN RYEGRASS	ANTHOXANTHUM	ODORATUM		REMOVE SWEET VERNALGRASS.	OTHER	BOUNCE PLATE:1 PASS, 32 DEG.						75% OF THE LOT WAS SALVAGED WITH A VERNAL COUNT OF 70 PER POUND. POOR BOUNCE MATERIAL WAS NOT RERUN.
587	LOLIUM		GULF RYEGRASS	ANTHOXANTHUM	ODORATUM	SWEET VERNALGRASS	REMOVE SWEET VERNALGRASS	PNEUMATIC	SEQ. 6" ESM					PNEUMATIC SEPARATION FOLLOWED BY VELVET ROLLS, SCREENS, OR INCLINED CHUTE DID NOT WORK.	PNEUMATIC SEPARATION FOLLOWED BY VIBRATION SEPARATION DID A VERY GOOD JOB OF REMOVING THE VERNALGRASS, BUT THE LOW CAPACITY WOULD BE A PROBLEM.
								VIBRATORY	SEQ. 180 GRIT	GOOD					
57	LOLIUM		RYEGRASS	ANTHOXATUM	ODORATUM	SWEET VERNALGRASS	REMOVE SWEET VERNALGRASS	VIBRATORY	ROUGH SANDPAPER DECK	GOOD	98	100	100		THE VIBRATOR PERFORMED VERY WELL RECOVERING 95% OF THE ORIGINAL SAMPLE AT 99.9% PURITY. THE VELVET ROLLS SHOWED PROMISE; CROP LOSS WAS HIGH, BUT RERUNNING THE REJECT FRACTION MIGHT SALVAGE MORE.
				ANTHOXATUM	ODORATUM	SWEET VERNALGRASS		VELVET ROLL	35 RPM, 32.5 DEG	FAIR	98	100	100		
				ANTHOXATUM	ODORATUM	SWEET VERNALGRASS		ELECTROSTATIC		POOR					
				ANTHOXATUM	ODORATUM	SWEET VERNALGRASS		DRAPER		FAIR					
				ANTHOXATUM	ODORATUM	SWEET VERNALGRASS		PNEUMATIC		POOR					
				ANTHOXATUM	ODORATUM	SWEET VERNALGRASS		AIR-SCREEN		POOR					
				ANTHOXATUM	ODORATUM	SWEET VERNALGRASS		OTHER	AIR JET SEPARATOR	POOR					
437	LOLIUM		MANHATTAN RYEGRASS	ANTHOXATUM	ODORATUM	SWEET VERNALGRASS	REMOVE SWEET VERNALGRASS	PNEUMATIC		FAIR					ALL TRIALS, PNEUMATIC, VIBRATOR, INCLINED CHUTE, WERE ONLY PARTIALLY SUCCESSFUL. THE VELVET ROLL MIGHT BE ANOTHER ONE TO TRY.
				ANTHOXATUM	ODORATUM	SWEET VERNALGRASS		VIBRATORY		FAIR					
				ANTHOXATUM	ODODATUM	SWEET VERNALGRASS		OTHER	INCLINED CHUTE	FAIR					
66	LOLIUM		RYEGRASS	ANTHRISCUS		CHERVIL	REMOVE CHERVIL, WEED SEEDS AND INERT MATERIAL.	ELECTROSTATIC	20KV, VERT-9.5, HOR-7, ROT-0	GOOD	97	70	99		BEST SEPARATION WAS OBTAINED WITH THE ELECTROSTATIC SEPARATOR WHERE 82% OF THE RYEGRASS WAS RECLAIMED AT 99% PURITY. MORE RYEGRASS MIGHT BE RECLAIMED BY RUNNING THE REJECT FRACTIONS THROUGH THE SEPARATOR AGAIN AT DIFFERENT SETTINGS.
				ANTHRISCUS		CHERVIL		SCREENS		POOR					
				ANTHRISCUS		CHERVIL		AIR-SCREEN		POOR					
				ANTHRISCUS		CHERVIL		VIBRATORY		POOR					
				ANTHRISCUS		CHERVIL		DRAPER		POOR					
				ANTHRISCUS		CHERVIL		MAGNETIC		POOR					
				ANTHRISCUS		CHERVIL		VELVET ROLL		POOR					
163	LOLIUM		COMMON RYEGRASS	ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL	REMOVE BUR BEAKCHERVIL	INDENT DISC	R5 DISC, 50RPM	GOOD	79	97	99		THE R5 INDENT DISC GAVE A SATISFACTORY SEPARATION REDUCING CHERVIL FROM 20% TO .6% WITH 30% SHRINKAGE OF ORIGINAL LOT.
				ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL		PNEUMATIC		POOR					
				ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL		DRAPER		POOR					
				ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL		VIBRATORY		POOR					
				ANTHRISCUS	SCANDICINA	BUR BEAKCHERVIL		ELECTROSTATIC		POOR					
307	LOLIUM		TETRAPLOID RYEGRASS	AVENA	FATUA	WILD OATS	REMOVE WILD OATS.	SCREEN	1/20X1/2	GOOD					THE 1/20X1/2 SCREEN SALVAGED 95% OF THE LOT WITH VERY LITTLE OR NO OATS.
				AVENA	FATUA	WILD OATS		PNEUMATIC		POOR					
				AVENA	FATUA	WILD OATS		VIBRATORY		POOR					
				AVENA	FATUA	WILD OATS		OTHER	RESILIENCE	POOR					
55	LOLIUM		RYEGRASS	BROMUS	COMUTATUS	HAIRY CHESS	REMOVE RATTAIL FESCUE, HAIRY CHESS, FRENCH PINK, SLOUGH GRASS, OTHER WEED SEEDS AND INERT MATERIAL.	AIR-SCREEN	1/12 TOP OVER 6X26 BOTTOM	GOOD		75		BOTH SCREENS HAD 1/8" DAMS ON THEM.	USING THE AIR-SCREEN MACHINE, 78.5% OF THE ORI
				VULPIA	MYUROS	RATTAIL FESCUE		AIR-SCREEN	1/12 TOP OVER 6X26 BOTTOM	GOOD		65			
				DIANTHUS		FRENCH PINK		AIR-SCREEN	1/12 TOP OVER 6X36 BOTTOM	POOR		20			
				BECKMANNIA		SLOUGHGRASS		AIR-SCREEN	1/12 TOP OVER 6X36 BOTTOM	FAIR		30			
548	LOLIUM		TETRAPLOID RYEGRASS	BROMUS		CHESS	REMOVE CHESS AND OTHER WEED SEEDS	SCREEN	SEQ.4X20 WIRE	GOOD				SOME RATTAIL FESCUE, SLOUGH GRASS AND MEADOW FOXTAIL WAS REMOVED BY PASSING THE THROUGH FRACTION OF THE 4X20 SCREEN THROUGH A 4X28 SCREEN. THIS REDUCED CROP YIELD FROM 89.5% TO 88.57%.	TO OBTAIN THESE RESULTS, THE SEEDS MUST BE UPENDED BY DAMS ON THE SCREENS OR SUFFICIENT AGITATION OF THE SCREENS.
				BROMUS		CHESS		SCREEN	SEQ.1/14 ROUND-HOLE	GOOD			100		
589	LOLIUM		RYEGRASS	BROMUS	COMUTATUS	HAIRY CHESS	REMOVE HAIRY CHESS.	SCREEN	SEQ. 4X20 WIRE MESH						THE BEST RESULTS WERE OBTAINED BY SCREENING THE MATERIAL, THEN USING THE PRECISION GRADER.
754	LOLIUM		RYEGRASS	BROMUS	TECTORUM	DOWNY BROME	REMOVE DOWNY BROME	SCREEN	SEQ. 6X28 WIRE MESH						THE MATERIAL WAS TESTED ON A NUMBER OF SEPARATING MACHINES, BUT RESULTS WERE INCONCLUSIVE DUE TO THE LOW CONCENTRATION OF CONTAMINANT (9 SEEDS/LB).
353	LOLIUM		TETRAPLOID RYEGRASS	CYNOSURUS	ECHINATUS	BRISTLY DOGTAIL	REDUCE BRISTLY DOGTAIL TO .25% OF LESS. THIS LOT WAS SCREENINGS.	OTHER	SEQ. PRECISION GR. 4 1/2 RD HOLE SHELL	POOR			92		NO TRIALS WERE SUCCESSFUL IN REDUCING BRISTLY DOGTAIL TO .25%. THE BEST THAT COULD BE DONE WAS WITH THE AIR-SCREEN MACHINE WHICH REDUCED THE DOGTAIL TO .44%.
				CYNOSURUS	ECHINATUS	BRISTLY DOGTAIL		AIR-SCREEN	8-1/2 OVER 1/17W/DAMS	POOR			100		
				CYNOSURUS	ECHINATUS	BRISTLY DOGTAIL		GRAVITY		POOR					
				CYNOSURUS	ECHINATUS	BRISTLY DOGTAIL		PNEUMATIC		POOR					
				CYNOSURUS	ECHINATUS	BRISTLY DOGTAIL		OTHER	BOUNCE PLATE	POOR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
518	LOLIUM		RYEGRASS	DACTYLIS	GLOMERATA	ORCHARDGRASS	REMOVE ORCHARDGRASS WITH SCREENS.	SCREENS	SEQ. 4X22 OVER 1/21, 2 PASSES		97	70	100		SUBMITTER WANTED ORCHARDGRASS REMOVED AS COMPLETELY AS POSSIBLE EVEN WITH LARGE CROP LOSS AND THIS WAS DONE.
				DACTYLIS	GLOMERATA	ORCHARDGRASS		SCREEN	SEQ. 4X24 OVER 1/21		100	97	100		
753	LOLIUM		RYEGRASS	ECHINOCHLOA	CRUSGALLI	BARNYARD GRASS	REMOVE BARNYARD GRASS	INDENT DISC	SEQUENCE, V5 SIZE DISK	GOOD	95	78	99	SUBMITTER REQUESTED CROP LOSS OF LESS THAN 5% AND QUANTITY OF BARNYARD GRASS LOWERED FROM 4.73% TO .3%.	CLEANING BY INDENT DISK FOLLOWED BY SCREENING LOWERED CONTAMINANT LEVEL ALMOST TO THAT SPECIFIED BY SUBMITTER. CROP LOSS WAS WITHIN SPECIFICATION. LARGER SIZES OF INDENTS REMOVE MORE CONTAMINANT BUT WITH GREATER CROP LOSS.
				ECHINOCHLOA	CRUSGALLI	BARNYARD GRASS		SCREEN	SEQ.1/2"X1/24" SLOTTED SCREEN	GOOD	99	28	100		
				ECHINOCHLOA	CRUSGALLI	BARNYARD GRASS		INDENT DISC	V5-1/2 INDENT DISK	GOOD	95	95	100		
540	LOLIUM		ETON RYEGRASS	ERGOT		ERGOT	REMOVE ERGOT.	SCREEN	6X20 SLOT	POOR		90			NO TRIALS COULD BE CONSIDERED SUCCESSFUL. THE ERGOT IS IN THE SAME SIZE RANGE AS THE RYEGRASS AND THERE WAS SOME ERGOT ALWAYS LEFT IN THE FINAL FRACTIONS.
				ERGOT		ERGOT		SCREEN	SEQ.	FAIR					
								PNEUMATIC	SEQ.	FAIR					
59	LOLIUM		RYEGRASS	ERGOT	RUBRA	ERGOT		INDENT DISC	SEQ.R4 DISC, 55RPM	FAIR					THE INDENT DISC REMOVED 27% OF THE ORIGINAL SAMPLE CONTAINING MANY OF THE SMALL WEED SEEDS. THE REMAINDER WAS PUT THROUGH THE AIR-SCREEN MACHINE WHICH SALVAGED 31% OF THE ORIGINAL SAMPLE AT 98% PURITY.
				VULPIA	MYUROS	RATTAIL FESCUE		AIR-SCREEN	SEQ.6X18 OVER 6X24 W/DAMS	FAIR	56	95	98		
54	LOLIUM		RYEGRASS	HORDEUM	VULGARE	BARLEY	REMOVE BARLEY, WILD OATS, CULTIVATED OATS, RATTAIL FESCUE, OTHER WEEDS, AND INERT MATERIAL.	AIR-SCREEN	1/14 RD OVER 4X30 WIRE	GOOD		100	100		THE AIR SCREEN MACHINE REMOVED 100% OF THE BARLEY AND OATS. OTHER WEED SEEDS MAY POSSIBLY BE REMOVED BY THE INDENT DISC. 84.3% OF THE ORIGINAL SAMPLE WAS RECLAIMED AT A PURITY OF 98.9%. ORIGINAL PURITY WAS 91%.
				AVENA	FATUA	WILD OATS		AIR-SCREEN	1/14 RD OVER 4X30 WIRE	GOOD		100	100		
				AVENA	SATIVA	CULTIVATED OATS		AIR-SCREEN	1/14 RD OVER 4X30 WIRE	GOOD		100	100		
				VULPIA	MYUROS	RATTAIL FESCUE		AIR-SCREEN	1/14 RD OVER 4X30 WIRE	POOR					
				INERT		INERT		AIR-SCREEN	1/14 RD OVER 4X30 WIRE	GOOD		90			
41	LOLIUM		RYEGRASS	LINUM	USITATISSIMUM	FLAX	REMOVE FLAX.	PNEUMATIC		POOR					BEST RESULTS OBTAINED WITH 1/12 SCREEN OVER 6X26 SCREEN OR AIR-SCREEN MACHINE WITH 1/12 SCREEN WITH DAMS TO UPEND GRASS.
				LINUM	USITATISSIMUM	FLAX		VELVET ROLL		POOR					
				LINUM	USITATISSIMUM	FLAX		AIR-SCREEN	SEQ. 1/12 SCREEN ON TOP	GOOD					
				LINUM	USITATISSIMUM	STEMS		AIR-SCREEN	SEQ. #8 OR #9 ON TOP, 1/12 ON BOTTOM	GOOD					
				LINUM	USITATISSIMUM	FLAX		GRAVITY		POOR					
422	LOLIUM		PELO RYEGRASS	LINUM	MULTIFLORUM	FLAX	REMOVE ANNUAL RYEGRASS	SCREENS	1/12 OVER 6X26	GOOD					THE PNEUMATIC AND VIBRATOR SEPARATORS DID THE BEST, REMOVING A HIGH PERCENTAGE OF ANNUAL RYEGRASS, BUT NOT QUITE ALL.
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		PNEUMATIC		FAIR					
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		OTHER	BOUNCE PLATE	POOR					
				LOLIUM	MULTIFLORUM	ANNUAL RYEGRASS		VELVET ROLL		POOR					
567	LOLIUM		PENNFINE RYEGRASS	LOLIUM			REMOVE ANNUAL BLUEGRASS AND TETRAPLOID RYEGRASS.	SCREENS	ROUND-HOLE	POOR					SCREENS DID NOT HELP BECAUSE COMPLETE IDENTIFICATION OF THE SEEDS IN THE RESULTING FRACTIONS WAS NOT POS
								INDENT CYLINDER	SEQ. #8 #10 TRIED	FAIR					
				POA	ANNUA	ANNUAL BLUEGRASS		SCREENS	SEQ.4X22 AND 4X24						
68	LOLIUM		RYEGRASS	MADIA	SATIVA	CHILEAN TARWEED	REMOVE CHILEAN TARWEED.	AIR-SCREEN	1/17 OVER 1/20 W/3 DAMS	GOOD	96	75	99		BEST RESULTS OBTAINED WITH AIR-SCREEN MACHINE USING 1/17 TOP SCREEN AND 1/20 BOTTOM SCREEN, EACH WITH 3 DAMS. 86% OF THE ORIGINAL LOT WAS RECLAIMED AT 99% PURITY.
				MADIA	SATIVA	CHILEAN TARWEED		PNEUMATIC		POOR					
		TETRAPLOID RYEGRASS		MADIA	SATIVA	CHILEAN TARWEED		VIBRATORY		POOR					
516	LOLIUM		RYEGRASS	MISC	MISC		REMOVE BROKEN WHEAT, PIGWEED, DOCK, LAMBSQUARTER, SLOUGHGRASS, VELVET GRASS, SMUT, INERT AND OTHER SMALL CONTAMINANTS.	SCREEN	SEQ. 1/15 ROUND-HOLE	GOOD					A SCREEN REMOVED LARGER CONTAMINANTS WITH NEGLIGIBLE CROP LOSS. A #7 INDENT CYLINDER REMOVED MOST OF THE SHORT CONTAMINANTS WITH ABOUT 5% CROP SHRINKAGE. THE SUBMITTER TOOK FRACTIONS FOR PURITY TESTS.
				MISC	MISC			INDENT CYLINDER	SEQ. #7 INDENT	GOOD					
487	LOLIUM		RYEGRASS	POA		BLUEGRASS	REMOVE BLUEGRASS	INDENT CYLINDER	#7 CYLINDER	FAIR				SAMPLE WAS LIFTED FRACTION FROM INDENT CYLINDER. SUBMITTER WANTED TO SALVAGE MORE CROP.	THE INDENT CYLINDER AND DISC SHOWED PROMISE. THE PNEUMATIC SEPARATOR WAS UNSATISFACTORY.
				POA		BLUEGRASS		INDENT DISC	4R OR 4 1/2R DISCS	FAIR					
				POA		BLUEGRASS		PNEUMATIC		POOR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
780	LOLIUM		RYEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS AND BARNYARD GRASS	SCREEN	SEQ. 1/23 ROUND HOLE	GOOD					A 1/23 ROUND HOLE SCREEN ALLOWED THE BLUEGRASS TO PASS THROUGH AND A V4 INDENT DISK LIFTED THE BARNYARD GRASS LEAVING THE RYEGRASS.
				ECHINOCHLOA	CRUSGALLI	BARNYARD GRASS		INDENT DISC	SEQ. V4	GOOD					
265	LOLIUM		RYEGRASS	TRASH		LARGE TRASH	REMOVE UNIDENTIFIED CARROT-LIKE SEED, IMMATURE CANARYGRASS, STEMS, DIRT, BROKEN RYEGRASS, ETC.	SCREEN	SEQ.6X32	GOOD					Samples were sent to submitter for evaluation.
				TRASH		TRASH		INDENT DISC	SEQ.R4 DISC	GOOD					
				LOLIUM		BROKEN RYEGRASS		INDENT DISC	SEQ.V4-1/2 DISC	GOOD					
				TRASH		TRASH		PNEUMATIC	SEQ.	POOR					
588	LOLIUM		DERBY RYEGRASS	VARIOUS		VARIOUS	REMOVE SMARTWEED, LAMBSQUARTER AND OTHER CONTAMINANTS.	SCREEN	SEQ. SCALPING SCREEN					THIS LOT WAS STRAIGHT FROM GRAIN BIN AND HEAVILY CONTAMINATED.	THIS MIXTURE RESPONDED VERY WELL TO SCREENING, THEN AIR SEPARATION, THEN INDENT CYLINDER.
								PNEUMATIC	SEQ. 6" ESM						
								INDENT CYLINDER	SEQ. #8 CYLINDER	GOOD					
545	LOLIUM		RYEGRASS	VULPIA	MYUROS	RATTAIL FESCUE	REMOVE RATTAIL FESCUE	SCREEN	4X28 WIRE MESH	GOOD			100		A 4X28 WI
21	LOLIUM		RYEGRASS				SEED BLENDING TESTS: SEE ORIGINAL REPORT.								
483	LOLIUM		RYEGRASS				REMOVE NODULES AND LENGTH-GRADE STRAW.							NODULES TO BE SEPARATED BECAUSE OF GREATER NUTRIENT VALUE. STRAW TO BE LENGTH GRADED FOR USE IN PARTICLE BOARD MANUFACTURE.	THE SUBMITTER WAS SHOWN SEVERAL SCREENING AND INDENT POSSIBILITIES ALONG WITH AIR CLASSIFICATION. THERE WAS ALSO POTENTIAL FOR THE TWO-SCREEN VERTICAL SCREEN SEPARATOR.
488	LOLIUM		RYEGRASS (MANHATTAN)				REMOVE ANNUAL BLUEGRASS AND BARNYARDGRASS								CRO
529	LOLIUM		RYEGRASS STRAW				FRACTIONATE FOR UTILIZATION.								FRACTIONATING TRIALS WERE MADE WITH THREE HAMMERMILLED LOTS OF THE STRAW USING SCREENS, INDENT DISCS, AND PNEUMATIC SEPARATOR. FRACTIONS WERE GIVEN TO SUBMITTER.
1177	LOLIUM		RYEGRASS												
26	LOTUS	CORNICULATUS	BIRDSFOOT TREFOIL	AMARANTHUS		PIGWEED	REMOVE PIGWEED WITH MODIFIED INDENT CYLINDER.	INDENT CYLINDER	1/17,1/18,1/19,26GA, 24GA	POOR				THE PNEUMATIC, ELECTROSTATIC, VELVET ROLL AND GRAVITY SEPARATORS WERE ALSO TRIED WITH NO SUCCESS.	IT IS NOT POSSIBLE TO REMOVE PIGWEED FROM BIRDSFOOT TREFOIL WITH THE MODIFIED INDENT CYLINDER DESIGNED FOR REMOVAL OF PIGWEED FROM ALFALFA.
1250	LOTUS	CORNICULATUS	BIRDSFOOT TREFOIL	INERT		STEMS, LEAVES	THRESH AND CONDITION GREEENOUSE GROWN TREFOIL	SCARIFIER	LAH W/#5WW MANTLE, 1/2"FRONT OPENING	GOOD					USE THE SCREENS LISTED TO CONDITION FIELD RUN OR HAND HARVESTED LOTUS SEED
				INERT		STEMS, LEAVES		SCREENS	16/64 RH SCALP, 1/12 RH TOP, 4X28 WW BOTTOM	GOOD					
				INERT		STEMS, LEAVES		PNEUMATIC	3.5 ON AIR SCREEN MACHINE	GOOD					
33	LOTUS	CORNICULATUS	BIRDSFOOT TREFOIL	PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN	REMOVE RED CLOVER, WHITE CLOVER AND BUCKHORN PLANTAIN.	INDENT CYLINDER	SEQ. #4 CYLINDER	FAIR				SHRINKAGE IN THE INDENT CYLINDER SEEMED EXCESSIVE, BUT A LARGER SAMPLE WOULD MAKE SHRINKAGE MORE FAVORABLE.	WHITE CLOVER WAS REMOVED BY SCREENING AND ALMOST ALL PLANTAIN WAS REMOVED BY INDENT CYLINDER, BUT REMOVAL OF RED CLOVER WAS UNSUCCESSFUL.
				TRIFOLIUM	PRATENSE	RED CLOVER		SCREENS	SEQ. 1/17 OVER 1/24	FAIR					
				TRIFOLIUM	REPENS	WHITE CLOVER		SCREENS	SEQ. 1/18 OVER 1/23	FAIR					
1086	LOTUS	CORNICULATUS	BIRDSFOOT TREFOIL	PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN	REMOVE BUCKHORN PLANTAIN, WILD CARROT, BULL THISTLE, OXEYE DAISY	INDENT CYLINDER	1.85 MM POCKET	GOOD				THI	USE 1.85 MM INDENT CYLINDER POCKET TO REMOVE BUCKHORN PLANTAIN, WILD CARROT, BULL THISTLE AND OXEYE DAISY.
				DAUCUS	CAROTA	WILD CARROT		INDENT CYLINDER	1.85 MM POCKET	GOOD					
				CIRSIUM	VULGARE	BULL THISTLE		INDENT CYLINDER	1.85 MM POCKET	GOOD					
				CHRYSANTHEMUM	LEUCANTHEMUM	OXEYE DAISY		INDENT CYLINDER	1.85 MM POCKET	GOOD					
833	LOTUS	CORNICULATUS	BIRDSFOOT TREFOIL	SOIL		SOIL	REMOVE SOIL PARTICLES	MAGNETIC	TWO PASSES, MAG. FLUID	GOOD					THE MAGNETIC, FRICTION, AND VIBRATOR SEPARATORS ARE CAPABLE OF REMOVING A HIGH PERCENTAGE OF SOIL PARTICLES IN THIS SAMPLE WITH MINIMAL CROP LOSS. THE VELVET ROLL REMOVED SOMEWHAT LESS SOIL WITH HIGHER CROP LOSS. DISSOLVING THE SOIL MAY ALSO POSSIBLE.
				SOIL		SOIL		FRICTION	FINE CARPET, SMOOTH RUBBER BAR	GOOD					
				SOIL		SOIL		VIBRATORY	CLOTH DECK	GOOD					
				SOIL		SOIL		VELVET ROLL		FAIR					
				SOIL		SOIL		OTHER	DISSOLVING SOIL IN WATER	FAIR					
693	LOTUS	CORNICULATUS ARVENSIS	DWARF ENGLISH TREFOIL	INERT		INERT	REMOVE FIELD MATTER AND INERT MATERIAL	FRICTION	VINYL BAR, SUEDE BELT	GOOD					THE SUBMITTER RETURNED WITH 225 LBS OF TREFOIL SEED WHICH WAS RUN OVER 1 FT FRICTION SEPARATOR FOUR TIMES AND THEN BLOWN ON PNEUMATIC SEPARATOR WHICH REDUCED INERT MATERIAL TO .08% AND REDUCED FIELD MATTER TO .25%.
				INERT		INERT		PNEUMATIC		FAIR		66			
				INERT		INERT		VELVET ROLL		FAIR		80			

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1227	LOTUS	PEDUNCULATUS	BIG TREFOIL	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE REDROOT PIGWEED AND SHEEP SORREL	SEQUENCE	.038"RH, 6X34WW, AIR	GOOD				THIS SAMPLE REPRESENTS 80 LBS OF MARSHFIELD LOTUS BREEDER SEED. ZERO TOLERANCE FOR THE WEEDS LISTED. LOT # SBR-83. A SEQUENCE OF SCREENS AND AIR REMOVED APPR	A SEQUENCE OF SCREENING WITH 0.038"ROUND AND 6X32 WOVEN WIRE RECTANGULAR WITH RELATIVELY HIGH AIR VELOCITY REMOVED APPROXIMATELY 90% OF THE PIGWEED AND MUCH OF THE SHRIVELED SEED. NO REMEX WAS FOUND.
				AMARANTHUS	RETROFLEXUS	REDROOT PIGWEED		SEQUENCE	.038"RH, 6X34WW, AIR	GOOD					
960	LOTUS	ULIGINOSIS	BIG TREFOIL	TRIFOLIUM	PRATENSE	REDCLOVER	REMOVE RED CLOVER						99		
578	LOTUS	ULIGINOSUS	KEIZER BIG TREFOIL	LOTUS	ULIGINOSUS	BIG TREFOIL	REMOVE IMMATURE, CRACKED SEED, BUCKHORN PLANTAIN, PIGWEED, DOGFENNEL, AND FOXTAIL.	PNEUMATIC		FAIR					THE PNEUMATIC SEPARATOR WAS EFFECTIVE IN REMOVING CRACKED SEED, BUT NOT MUCH WEED SEED
								GRAVITY		POOR					
								FRICTION		POOR					
796	LOTUS	ULIGINOSUS	LOTUS	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL	INDENT CYLINDER	1/18X26 SPECIAL INDENT CYL	GOOD	99	78	100	THIS PROBLEM SAMPLE FORMERLY #796A. RELATED SAMPLE, FORMERLY #796B, IS NOW 1044.	SHEEP SORREL MAY BE PARTIALLY REMOVED FROM LOTUS SEED BY 1/18 X 26 OR SIMILAR SPECIAL INDENT CYLINDER. 78% OF THE SHEEP SORREL WAS REMOVED WITH A CROP LOSS OF 7% AND FINAL PURITY OF 99.8%.
12	LOTUS		LOTUS	PLANTAGO	LANCEOLATA	BUCKHORN	REMOVE BUCKHORN, ORCHARDGRASS, AND RED CLOVER	INDENT CYLINDER	SEQ. #4 CYLINDER, SPEED C						THE FIRST SEQUENCE, DISREGARDING YIELDS, GAVE THE BEST RESULTS. THE SECOND SEQUENCE IS THE BEST ELECTROSTATIC RESULTS AND YIELDED VERY CLEAN LOTUS. THE BLOWER MAY BE ABLE TO REPLACE THE INDENT AND VELVET ROLLS IN THE FIRST SEQUENCE.
								VELVET ROLL	SEQ.SPEED 5						
								ELECTROSTATIC	SEQ.28 RPM, RERUN RAKE-OFF						
								SCREEN	SEQ.1/20 ON FINAL RAKE-OFF						
								ELECTROSTATIC	SEQ.2.RAKE-OFF, 30M-32DEG-65DEG-COMB. (+)- 5 PASSES						
								ELECTROSTATIC	SEQ.2.ROLL-OFF, 30M-32DEG-50DEG-COMB. (+)- 5 PASSES						
				DACTYLIS	GLOMERATA	ORCHARDGRASS									
				TRIFOLIUM	PRATENSE	RED CLOVER									
299	LOTUS		LOTUS	TRIFOLIUM	PRATENSE	RED CLOVER	REMOVE RED CLOVER, ALFALFA, AND BUCKHORN.	INDENT CYLINDER	1/16 X 26GA. CYLINDER	GOOD				RESULTS WITH THE VIBRATOR, VELVET ROLLS, PNEUMATIC SEPARATOR, ELECTROSTATIC SEPARATOR AND SCREENS WERE UNSATISFACTORY.	THE 1/16 X 26GA INDENT CYLINDER DID THE BEST JOB, YIELDING 82% OF THE LOTUS WITH ONLY A TRACE OF ALFALFA AND CLOVER. THE DRAPER ALSO DID WELL, BUT LEFT MORE OF THE ALFALFA AND CLOVER IN THE CROP.
				MEDICAGO	SATIVA	ALFALFA		INDENT CYLINDER	1/16 X 26GA. CYLINDER	GOOD					
				PLANTAGO	LANCEOLATA	BUCKHORN		INDENT CYLINDER	1/16 X 26GA. CYLINDER	GOOD					
300	LOTUS		LOTUS	TRIFOLIUM	PRATENSE	RED CLOVER	REMOVE RED CLOVER, ALFALFA AND BUCKHORN.	INDENT CYLINDER	1/17 X 26GA. CYLINDER					THIS LOT WAS SIMILAR TO THAT IN PS#299, BUT RESPONDED BETTER TO A SLIGHTLY SMALLER INDENT SIZE.	THE 1/17 X 26GA INDENT CYLINDER LIFTED 73% OF THE LOT AS CLEAN LOTUS WITH A TRACE OF CONTAMINANTS. BETTER RESULTS WERE OBTAINED BY SPLITTING THE ORIGINAL LOT ON THE INDENT AND THEN RUNNING THE TWO FRACTIONS ON THE DRAPER.
				MEDICAGO	SATIVA	ALFALFA		INDENT CYLINDER	1/17 X 26GA. CYLINDER						
				PLANTAGO	LANCEOLATA	BUCKHORN		INDENT CYLINDER	1/17 X 26GA. CYLINDER						
1212	LUPINUS	SPP	PERENNIAL LUPIN	GALLIUM			REMOVE BEDSTRAW	INDENT CYLINDER	5MM POCKET TO LIFT BEDSTRAW	GOOD		100		THIS MATERIAL REPRESENTS 1500 LBS. BEDSTRAW IS NOXIOUS AND THEREFORE NEEDS TO BE REMOVED BELOW DETECTABLE LEVELS. THE INDENT CYLINDER REMOVED ALL DETECTABLE BEDSTRAW IN THE SAMPLE RUN.	
								SCREEN	#7 RH TO DROP BEDSTRAW	FAIR		80			
								INDENT CYLINDER	7MM TO LIFT LUPIN	GOOD		90			
								VELVET ROLL		POOR					
489	LUPINUS		LUPINE	GALLIUM			SCARIFY SEED.	BELT THRESHER							SAMPLES SENT TO SUBMITTER FOR GERMINATION TESTS.
								SCARIFIER	SANDPAPER ROLLER						
								OTHER	FLAME						
294	LYCOPERSICON	LYCOPERSICUM	TOMATO	INERT		STRAW	REMOVE BARNYARDGRASS	AIR-SCREEN	6X20 SCREEN						AN AIR SCREEN MACHINE WITH A 6X20 SCREEN DROPPED 89% OF THE TOMATO WITH A LOW COUNT OF BARNYARDGRASS.
295	LYCOPERSICON	LYCOPERSICUM	TOMATO	INERT			REMOVE DARK INERT MATERIAL	ELECTROSTATIC							THIS SAMPLE RESPONDED ONLY TO THE ELECTROSTATIC SEPARATOR. CLEAN SEED HELD A CHARGE LONGER THAN THE INERT MATERIAL.
976	LYCOPERSICON	LYCOPERSICUM	TOMATO	INERT		ROCKS	DETERMINE CLEANING SEQUENCE	PNEUMATIC	SDB	GOOD				SCREENS WERE ALSO TESTED TO REDUCE ORGANIC INERT MATERIAL.	ROCKS CAN BE REMOVED FROM TOMATO SEED WITH A PNEUMATIC SEPARATOR
1008	LYCOPERSICON	LYCOPERSICUM	TOMATO	LYCOPERSICON	LYCOPERSICUM	TOMATO	TEST LAH HULLER SCARIFIER TO REMOVE HAIRS	SCARIFIER							

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1226	LYCOPERSICON	LYCOPERSICUM	TOMATO				INFORMATION ON CONDITIONING TOMATO SEED								
1208	MACADAMIA	TERNIFOLA	MACADAMIA NUTS	INERT		STONES	REMOVE STONES	SPIRAL		GOOD				THIS MATERIAL WAS SUBMITTED TO DETERMINE METHODS TO REMOVE STONES FROM THE UNHULLED NUTS. BOTH SPIRAL AND DRAPER WERE TESTE	
				INERT		STONES		DRAPER		GOOD					
				INERT		STONES		FRICTION							
380	MEDICAGO	SATIVA	ALFALFA	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS GROATS								MEASUREMENTS ONLY.
394	MEDICAGO	SATIVA	TOWNSVILLE LUCERNE	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS AND LUCERNE WITHOUT HOOK.								MEASUREMENTS ONLY.
2	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	REMOVE PIGWEED.	INDENT CYLINDER	#4 CYLINDER, 36RPM	FAIR				SPIRAL, DRAPER, PNEUMATIC, VELVET ROLLS, ELECTROSTATIC, INDENT DISC, GRAVITY AND HAND SCREENS YIELDED UNSATISFACTORY RESULTS.	THE INDENT CYLINDER WILL REMOVE A FRACTION WHICH HAS VERY LITTLE ALFALFA AND A HIGH CONCENTRATION OF PIGWEED, BUT A HIGH PERCENTAGE OF THE PIGWEED IS STILL LEFT IN THE SAMPLE.
37	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	REMOVE PIGWEED USING MODIFIED INDENT CYLINDER FABRICATED FROM PERFORATED SCREEN.	INDENT CYLINDER	1/16 AND 1/17X26GA CYL.	GOOD		100	100		A 100% PURE LOT WAS ACHIEVED WITH LOSSES RANGING FROM ABOUT 5% TO 2% IN THE DIFFERENT TRIALS.
71	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	REMOVE PIGWEED.	INDENT CYLINDER	1/16X26GA. CYL, REJECT RERUN	GOOD	81	99	100		BEST RESULTS OBTAINED WITH THE 1/16X26GA. INDENT CYLINDER, RERUNNING THE REJECT FRACTION.
				AMARANTHUS		PIGWEED		PNEUMATIC		POOR					
				AMARANTHUS		PIGWEED		VIBRATORY	FINE DECK	FAIR	81	95	99		
123	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	REMOVE PIGWEED WITH VIBRATOR SEPARATOR.	VIBRATORY	ROUGH 3/8" DECK	GOOD	51	99	100		THE VIBRATOR DID VERY WELL. 39% OF THE ORIGINAL LOT WAS RECLAIMED WITH ABOUT .5% PIGWEED AND LOSS OF ABOUT 12%.
128	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	REMOVE PIGWEED WITH INDENT CYLINDER	INDENT CYLINDER	1/16X26GA CYLINDER, 6.5 RPM	GOOD	99	96	100		VERY GOOD RESULTS WERE OBTAINED WITH THE INDENT CYLINDER (1/17 AND 1/16). SINCE SHRINKAGE WAS SO LOW, A SLIGHTLY LARGER SIZE CYLINDER SHOULD PROVIDE AN EVEN CLEANER PRODUCT WITH AN ACCEPTABLE INCREASE IN CROP LOSS.
				AMARANTHUS		PIGWEED		INDENT CYLINDER	1/17X24GA CYLINDER, 6.5 RPM	GOOD	99	95	100		
239	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	DETERMINE INDENT SIZE TO REMOVE PIGWEED.	INDENT CYLINDER	1/16 X 26 GA	GOOD					OF SEVERAL CYLINDERS TRIED, THE 1/16 X 26GA. GAVE THE BEST RESULTS, PRODUCING A CLEAN FRACTION WITH ONLY 16 PIGWEED/LB. A LATER RECOMMENDATION WAS TO SCREEN THE SAMPLE FIRST ON A 1/17 ROUND-HOLE AND THEN USE A 1/17 X 26GA INDENT.
281	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	REMOVE PIGWEED FROM THIS SAMPLE WHICH WAS A REJECT FRACTION FROM A #5 CYLINDER.	INDENT CYLINDER	SEQ.1/16X26 CYLINDER	GOOD					THE 1/16X26 INDENT CYLINDER RECOVERED 73% OF THE SAMPLE WITH 200 PI
				AMARANTHUS		PIGWEED		SCREEN	SEQ.1/16 ROUND HOLE	GOOD					
378	MEDICAGO	SATIVA	ALFALFA	AMARANTHUS		PIGWEED	REMOVE PIGWEED.	SCREEN	SEQ.1/16" ROUND-HOLE	GOOD					ACCORDING TO SEED MEASUREMENTS, A .07"DI
				AMARANTHUS		PIGWEED		INDENT CYLINDER	SEQ.#4 INDENT,FRACT OVER 1/16	GOOD					
				AMARANTHUS		PIGWEED		INDENT CYLINDER	SEQ..0625"DIAX.019"DEEP,FRACT THRU 1/16	GOOD					
				AMARANTHUS		PIGWEED		INDENT CYLINDER	#4 INDENT	FAIR					
				AMARANTHUS		PIGWEED		VIBRATORY	SANDPAPER DECK	FAIR					
109	MEDICAGO	SATIVA	ALFALFA	AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED	REMOVE RUSSIAN PIGWEED.	SCREEN	6X21 SCREEN	GOOD		100	100		A 6X21 SCREEN DID AN ESSENTIALLY 100% SEPARATION.
246	MEDICAGO	SATIVA	ALFALFA	AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED	REMOVE RUSSIAN PIGWEED.	SCREENS	VARIOUS	POOR					ALL TRIALS WERE UNSATISFACTORY.
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		ELECTROSTATIC		POOR					
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		VIBRATORY		POOR					
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		VELVET ROLL		POOR					
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		PNEUMATIC		POOR					
266	MEDICAGO	SATIVA	ALFALFA	AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED	REMOVE RUSSIAN PIGWEED.	SCREEN	SEQ.6X24	FAIR					The 6x24 screen/vibrator sequence recovered 30% of the original lot as clean seed. The pneumatic recovered 28% of the lot as clean seed.
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		VIBRATORY	SEQ.80 GRIT DECK	FAIR					
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		PNEUMATIC		FAIR					
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		OTHER	BOUNCE SEPARATOR	POOR					
				AXYRIS	AMARANTHOIDES	RUSSIAN PIGWEED		SCREENS	6X19 AND 6X20	POOR					
297	MEDICAGO	SATIVA	ALFALFA	CARDARIA		WHITETOP	REMOVE WHITETOP, BINDWEED, AND RUSSIAN KNAPWEED.	SCREENS	SEQ.(4X18)/(1/16)/(1/18)			85		THE VIBRATOR, BLOWER, ELECTROSTATIC AND VELVET ROLLS WERE UNSATISFACTORY.	THE SCREENING/#6 INDENT SEQUENCE YIELDED 50% WHILE REMOVING 100% BINDWEED, 95% KNAPWEED, AND 82% WHITETOP. THE SCREENING/.116"X.037" INDENT SEQUENCE YIELDED 57% AND REMOVED ABOUT THE SAME AMOUNTS OF THE CONTAMINANTS AS THE #6 CYLINDER DID.
				CONVOLVULUS		BINDWEED		SCREENS	SEQ.(4X18)/(1/16)/(1/18)			90			
				CENTAUREA	REPENS	RUSSIAN KNAPWEED		SCREENS	SEQ.(4X18)/(1/16)/(1/18)			75			

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				CARDARIA		WHITETOP		INDENT CYLINDER	SEQ.#6 OR .116"X.037" CYLINDER			82			
				CONVULVULUS		BINDWEED		INDENT CYLINDER	SEQ.#6 OR .116"X.037" CYLINDER			100			
				CENTAUREA	REPENS	RUSSIAN KNAPWEED		INDENT CYLINDER	SEQ.#6 OR .116"X.037" CYLINDER			95			
18	MEDICAGO	SATIVA	ALFALFA	CENCHRUS		SANDBUR	REMOVE SANDBUR	ELECTROSTATIC	BOOSTER MODEL#2, 18.8KV	GOOD		100	100	SAMPLE SIZE WAS ABOUT 1/2 CUP.	THE ELECTROSTATIC SEPARATOR PERFORMED THIS SEPARATION VERY WELL.
183	MEDICAGO	SATIVA	ALFALFA	CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE	REMOVE YELLOW STARTHISTLE.	SCREEN	1/17 ROUND HOLE W/DAMS	GOOD					THE 1/17 ROUND HOLE SCREEN DID A GOOD JOB. IN SEVERAL TRIALS IT HELD 50-60% OF THE SAMPLE WITH A PURITY OF FROM 12 TO 3 STARTHISTLE SEEDS/LB, WELL WITHIN THE DESIRED 18 SEEDS/LB.
				CENTAUREA	SOLSTITIALIS	YELLOW STARTHISTLE		INDENT CYLINDER	.09"DIAM X .03"DEEP POCKETS	POOR					
290	MEDICAGO	SATIVA	ALFALFA	CENTAUREA	SOLSTITIALIS	RUSSIAN KNAPWEED	REMOVE RUSSIAN KNAPWEED	SCREEN	SEQ.1/17	GOOD					SCREENING WITH A 1/17 ROUND HOLE AND RUNNING THE REJECT FRACTION THROUGH THE .098"X.025 INDENT CYLINDER YIELDED 92% OF THE LOT AS PURE ALFALFA.
				CENTAUREA	REPENS	RUSSIAN KNAPWEED		INDENT CYLINDER	SEQ..098"X.025",OVER 1/17 FRACT	GOOD		100	100		
375	MEDICAGO	SATIVA	VERNAL ALFALFA	CENTAUREA	REPENS	RUSSIAN KNAPWEED	REMOVE RUSSIAN KNAPWEED.	SCREEN	1/16" ROUND-HOLE	GOOD					A 1/16" ROUND-HOLE SCREEN SCALPS OFF THE KNAPWEED WITH ABOUT 4% LOSS. SEED MEASUREMENTS INDICATE THAT A #5 INDENT CYLINDER WOULD LIFT THE ALFALFA AND REJECT KNAPWEED.
382	MEDICAGO	SATIVA	ALFALFA	CENTAUREA	REPENS	KNAPWEED	REMOVE KNAPWEED.	MAGNETIC	IRON FILINGS/WATER	GOOD		100	100	SEED MEASUREMENTS INDICATE THAT A 1/15" ROUND-HOLE SCREEN SHOULD SCALP OFF ABOUT 80% OF THE KNAPWEED ALONG WITH 5% OF THE ALFALFA.	THE MAGNETIC SEPARATOR IS RECOMMENDED FOR THIS SEPARATION. 100% REMOVAL OF CONTAMINANT WAS ACHIEVED WITH 5% LOSS.
1237	MEDICAGO	SATIVA	ALFALFA	CUSCUTA		DODDER	REMOVE DODDER FROM ALFALFA	FRICTION	AS A SUGGESTION, NO SAMPLE					CALLER WAS SEEKING METHODS FOR REMOVAL OF DODDER FROM ALFALFA SEED OTHER THAN MAGNETIC SEPARATION WHICH WAS ALREADY IN USE. SUGGESTION WAS TO CONTACT MANUFACTURERS OF FRICTION SEPARATORS. PLANS AND A MANUFACTURERS LIST OF SEED EQUIPMENT WERE SENT.	
309	MEDICAGO	SATIVA	ALFALFA	MALVA		MALLOW	REMOVE ALL OR NEARLY ALL MALLOW (NOXIOUS).	SCREENS	SEQ.1/16 OVER 1/19	FAIR					MATERIAL WAS PASSED THROUGH A 1/16 SCREEN, A 1/19 SCREEN AND .075X.030 INDENT CYLINDER. 69% OF THE LOT WAS RECOVERED WITH 21 MALLOW/LB.
				MALVA		MALLOW		INDENT CYLINDER	SEQ..075X.030 INDENT	FAIR					
				MALVA		MALLOW		OTHER	#4 GRADER SHELL	POOR					
				MALVA		MALLOW		VIBRATORY		POOR					
				MALVA		MALLOW		INDENT DISC	R3-1/2 DISC	POOR					
				MALVA		MALLOW		VELVET ROLL		POOR					
				MALVA		MALLOW		ELECTROSTATIC		POOR					
462	MEDICAGO	SATIVA	ALFALFA	MALVA		MALLOW	REMOVE MALLOW	MAGNETIC	MEDIUM FINE POWDER	GOOD		100	100	FINAL PURITIES FOR THE ABOVE TRIALS WERE 0 MALLOW/LB, 81/LB, 0/LB, 178/LB, AND 227/LB, RESPECTIVELY.	EXCELLENT RESULTS WERE HAD WITH THE MAGNETIC SEPARATOR. A MEDIUM FINE POWDER WAS USED WHICH WAS FIRST PASSED THROUGH A 400 MESH SCREEN. 96% OF THE ALFALFA WAS RECOVERED WITH 100% PURITY.
				MALVA		MALLOW		VIBRATORY	SANDPAPER DECK	FAIR					
				MALVA		MALLOW		VELVET ROLL		FAIR		100	100		
				MALVA		MALLOW		INDENT CYLINDER		FAIR					
				MALVA		MALLOW		PNEUMATIC		POOR					
692	MEDICAGO	SATIVA	ALFALFA	MALVA		MALLOW	REMOVE MALLOW	FRICTION	VINYL BAR, SUEDE BELT, 4 PASSES	GOOD	96	50	98		THE FRICTION SEPARATOR IS EFFECTIVE, BUT REQUIRES MANY PASSES. THE MAGNETIC SEPARATOR, ALSO EFFECTIVE, MAY BE MORE PRACTICAL.
				MALVA		MALLOW		MAGNETIC	#4 IRON POWDER	GOOD	96	98	100		
566	MEDICAGO	SATIVA	YELLOW ALFALFA	MEDICAGO	SATIVA	ALFALFA	REMOVE BLACK ALFALFA. THE BLACK SEED IS BRED WITH THIS COLOR TO SERVE AS A GENETIC MARKER AND IS USED AS A POLLINATOR IN PRODUCING HYBRID ALFALFA.								NO CONVENTIONAL METHOD WOULD SEEM TO BE PRACTICAL IN THIS SEPARATION BECAUSE THE SEEDS ARE SO SIMILAR. THE COLOR SO
403	MEDICAGO	SATIVA	ALFALFA	MELILOTUS		SWEETCLOVER	REMOVE SWEETCLOVER	SCREEN	6X19 SLOTTED-HOLE	FAIR					A 6X19 SLOTTED-HOLE SCREEN HELD THE MAJORITY OF THE SWEETCLOVER.
442	MEDICAGO	SATIVA	ALFALFA	MELILOTUS		SWEETCLOVER	REMOVE SWEETCLOVER	INDENT CYLINDER	#5 CYLINDER	FAIR				WIDTH AND THICKNESS SIMILARITIES RULE OUT USE OF SCREENS.	ONLY THE #5 INDENT CYLINDER SHOWED ANY PROMISE. IT LIFTED ALFALFA ALONG WITH ABOUT 1/3 OF THE LOT.
				MELILOTUS		SWEETCLOVER		PNEUMATIC		POOR					
				MELILOTUS		SWEETCLOVER		VELVET ROLL		POOR					
				MELILOTUS		SWEETCLOVER		ELECTROSTATIC		POOR					
				MELILOTUS		SWEETCLOVER		VIBRATORY		POOR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
402	MEDICAGO	SATIVA	ALFALFA	POLYGONUM	ARGYROCOLEON	SILVERSHEATH KNOTWEED	REMOVE SILVERSHEATH KNOTWEED.	SCREEN	SEQ.#5 TRIANGULAR	GOOD					THE RECOMMENDED CLEANING SEQUENCE IS TO USE A #5 TRIANGULAR SCREEN, THEN A 1/22" ROUND-HOLE SCREEN, TO DROP KNOTWEED. THE CLEAN FRACTIONS ARE THEN RUN OVER THE ELECTROSTATIC SEPARATOR OR VIBRATOR.
				POLYGONUM	ARGYROCOLEON	SILVERSHEATH		SCREEN	SEQ.1/22 ROUND-HOLE	GOOD					
				POLYGONUM	ARGYROCOLEON	SILVERSHEATH KNOTWEED		ELECTROSTATIC	SEQ.(OR USE VIBRATOR INSTEAD)	GOOD					
421	MEDICAGO	SATIVA	ALFALFA	RUMEX	CRISPUS	CURLY DOCK	REMOVE CURLY DOCK		1/17" ROUND-HOLE	GOOD		100	100		SEVERAL METHODS WORKED VERY WELL ON THIS SAMPLE. A 1/17" ROUND-HOLE SCREEN, A 3/64X5/16 SLOTTED HOLE SCREEN AND THE ELECTROSTATIC SEPARATOR EACH REMOVED ALL THE DOCK WITH 8% LOSS OR LESS.
				RUMEX	CRISPUS	CURLY DOCK		SCREEN	3/64X5/16 SLOT	GOOD		100	100		
				RUMEX	CRISPUS	CURLY DOCK		ELECTROSTATIC		GOOD		100	100		
				RUMEX	CRISPUS	CURLY DOCK		VELVET ROLL		FAIR		100	100		
				RUMEX	CRISPUS	CURLY DOCK		VIBRATORY		FAIR		100	100		
98	MEDICAGO	SATIVA	ALFALFA	SORGHUM	HALEPENSE	JOHNSONGRASS	REMOVE JOHNSONGRASS USING MAGNETIC SEPARATOR.	MAGNETIC	WATER W/IRON POWDER	POOR					MAGNETIC SEPARATION WITH AN OIL/POWDER MIXTURE DID QUITE WELL, RECOVERING 81% OF THE SAMPLE AT 99.5% PURITY.
				SORGHUM	HALEPENSE	JOHNSONGRASS		MAGNETIC	OIL W/IRON POWDER, 1/8" CLEARANCE	GOOD	98	75	100		
189	MEDICAGO	SATIVA	ALFALFA	SORGHUM	HALEPENSE	JOHNSONGRASS	REMOVE JOHNSONGRASS	VIBRATORY	FINE TEXTURED DECK	GOOD		100	100		THE VIBRATOR RECOVERED 75% OF LOT FREE OF JOHNSONGRASS AND THE INDENT CYLINDER WAS ABLE TO RECOVER 89% AT A PURITY OF 99.5%. BEST RESULTS, THOUGH, WERE WITH THE SCREEN/INDENT SEQUENCE WHICH RECOVERED A TOTAL OF 96% OF THE LOT AT 99.64% PURITY.
				SORGHUM	HALEPENSE	JOHNSONGRASS		SCREEN	SEQ.1/20X1/2	GOOD			100		
				SORGHUM	HALEPENSE	JOHNSONGRASS		INDENT CYLINDER	SEQ.REJECT FRACTION FROM SCREEN RUN, .116"DIAMX.037"DEEP POCKETS	GOOD			99		
				SORGHUM	HALEPENSE	JOHNSONGRASS		INDENT CYLINDER	.116"DIAMX.036"DEEP POCKETS				100		
235	MEDICAGO	SATIVA	ALFALFA	SORGHUM	HALEPENSE	JOHNSONGRASS	REMOVE HULLED JOHNSONGRASS (800/LB) FROM ALFALFA.	VIBRATORY	FAIR	GOOD		94			BEST RESULTS WITH THE VIBRATOR SEPARATOR WHERE THE TWO MIDDLE FRACTIONS WERE RERUN AND ALL LOWER FRACTIONS WERE COMBINED TO YIELD 97% OF THE LOT WITH 94% OF THE JOHNSONGRASS REMOVED.
				SORGHUM	HALEPENSE	JOHNSONGRASS		VELVET ROLL	210RPM, 15 DEG.2 UPPERMOST FRACTS. RERUN TWICE.	FAIR		97			
				SORGHUM	HALEPENSE	JOHNSONGRASS		PNEUMATIC		POOR		87			
				SORGHUM	HALEPENSE	JOHNSONGRASS		ELECTROSTATIC	20KV,HOR=-5,VER=-11	POOR					
				SORGHUM	HALEPENSE	JOHNSONGRASS		SCREENS	VARIOUS	POOR					
429	MEDICAGO	SATIVA	ALFALFA	SORGHUM	HALEPENSE	JOHNSONGRASS	REMOVE HULLED JOHNSONGRASS SEED.	MAGNETIC		GOOD		100	100		EXCELLENT RESULTS WERE OBTAINED WITH THE MAGNETIC SEPARATOR WHICH REMOVED ALL JOHNSONGRASS WITH ONLY 1% LOSS.
				SORGHUM	HALEPENSE	JOHNSONGRASS		VELVET ROLL		FAIR					
				SORGHUM	HALEPENSE	JOHNSONGRASS		VIBRATORY	SANDPAPER DECK	FAIR					
				SORGHUM	HALEPENSE	JOHNSONGRASS		PNEUMATIC		POOR					
				SORGHUM	HALEPENSE	JOHNSONGRASS		ELECTROSTATIC		POOR					
				SORGHUM	HALEPENSE	JOHNSONGRASS		SCREENS		POOR					
513	MEDICAGO	SATIVA	ALFALFA	TRIFOLIUM	PRATENSE	RED CLOVER	REMOVE SWEET CLOVER AND RED CLOVER.	INDENT CYLINDER	#4 CYLINDER	FAIR				FOR THE RED CLOVER, SC	BEST RESULTS IN REMOVING RED CLOVER WERE OBTAINED WITH
				TRIFOLIUM	PRATENSE	RED CLOVER		VIBRATORY	FINE SANDPAPER	FAIR		60			
				MELILOTUS		SWEETCLOVER		MAGNETIC	FINE IRON PDR, WATER+WETTING AGENT	GOOD		100	100		
322	MEDICAGO	SATIVA	ALFALFA			MUSTARD	REMOVE MUSTARD.	DRAPER	PLASTIC BELT, 46FPM, 13 DEG	GOOD		100	100		THE SCREEN/INDENT CYLINDER SALVAGED 94% OF THE LOT WITH VERY FEW MUSTARD SEED. THE VIBRATOR AND DRAPER REMOVED ALL THE MUSTARD SEED WHILE SALVAGING 85% AND 96% OF THE LOT, RESPECTIVELY.
						MUSTARD		VIBRATORY	#80 SANDPAPER DECK	GOOD		100	100		
						MUSTARD		SCREEN	SEQ.1/17 ROUND HOLE						
						MUSTARD		INDENT CYLINDER	SEQ.#4, FRACT OVER 1/17	FAIR					
						MUSTARD		INDENT CYLINDER	SEQ.1/17X24GA, THRU 1/17	FAIR					
759	MEDICAGO	SATIVA	ALFALFA												
793	MENTHA	PIPERITA	PEPPERMINT	LEAVES AND STEMS		LEAVES AND STEMS	REMOVE STEM MATERIAL, GRADE TO SIZE.	AIR-SCREEN	SEQ.#14 OR #16 RD TOP SCR, #8 RD BOTTOM					FINE MATERIAL FROM FIRST SCREENING WENT THROUGH SECOND SCREENING. LARGE LEAF/STEM MATERIAL FROM FIRST SCREENING WENT THROUGH SQUEEZE ROLLERS FOR BREAKING UP, THEN COULD BE RUN BACK THROUGH INITIAL SCREENS.	PEPPERMINT LEAF MAY BE SUCCESSFULLY BE GRADED TO SIZE AND SEPARATED FROM STEM MATERIAL BY USE OF THE AIR-SCREEN MACHINE.
				FINE MATERIAL		FINE MATERIAL		AIR-SCREEN	SEQ.#7 RD TOP SCR, 1/20 RD BOTTOM						
				LARGE MATERIAL		LARGE MATERIAL		OTHER	SQUEEZE ROLLERS						
1005	MENTHA	PIPERITA	PEPPERMINT	MENTHA			THRESH & SEPARATE LEAF MATERIAL	SCARIFIER	#8 MANTLE	GOOD					A PERFORATED MANTEL IS DESIRED AND WILL BE CONSTRUCTED BY PETER M.

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				MENTHA				INDENT CYLINDER	4 MM	GOOD					
710	MIMULUS		MONKEYFLOWER	INERT		INERT	THRESH AND REMOVE INERT MATERIAL	PNEUMATIC	SEQ.	GOOD				PROBLEM SAMPLES #1069, #1070, #1071, AND #1072, WERE ALL FORMERLY PART OF SAMPLE #710.	MONKEYFLOWER WAS EFFECTIVELY THRESHED AND CLEANED USING THE ABOVE PNEUMATIC/BELT THRESHER/SCREEN SEQUENCE.
				INERT		INERT		BELT THRESHER	SEQ.	GOOD					
				INERT		INERT		SCREEN	SEQ. 1/25 RD HOLE	GOOD					
1012	MIMULUS		MONKEYFLOWER				CONDITIONING OF SMALL-SEEDED NATIVE PLANTS							MR. NELSON WILL SEND SAMPLES OF FINE SEEDS BY ABOUT 4/29/88 AND WILL VISIT THE LAB ABOUT 5/30/88	
347	MUHLENBERGIA	WRIGHTII	SPIKE MUHLY	TRASH		TRASH	REMOVE SAND DROPSEED, LOVEGRASS AND TRASH.	SCREENS	SEQ.#7 OVER .033" ROUND-HOLE	GOOD				GOOD RESULTS WERE OBTAINED BY SCALPING THIS COMBINE-RUN LOT ON A #7 ROUND-HOLE SCREEN,.033" ROUND-HOLE SCREEN AND THEN BLOWING IT TO REMOVE TRASH. A #7 INDENT REMOVED LONG STEMS AND A #4 INDENT REMOVED LOVEGRASS AND DROPSEED.	
				TRASH		TRASH		PNEUMATIC	SEQ.FRACT THRU .033"	GOOD					
				STEMS		STEMS		INDENT CYLINDER	SEQ.#7 CYL, HEAVY FRACT FROM PNEUM.	GOOD					
				SPOROBOLUS	CRYPTANDRUS	SAND DROPSEED		INDENT CYLINDER	SEQ.#4 CYL	GOOD					
				ERAGROSTIS		LOVEGRASS		INDENT CYLINDER	SEQ.#4 CYL	GOOD					
1050	MYOSTOTIS		FORGETMENOT	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	INDENT CYLINDER	2MM	FAIR		95%		THIS SAMPLE CONTAINED ANNUAL BLUEGRASS THAT HAD TO BE REMOVED COMPLETELY. THE INDENT CYLINDER REMOVED A LARGE PORTI	USE INDENT CYLINDER WITH 2MM POCKET TO REMOVE ANNUAL BLUEGRASS
1066	NASTURTIUM		NASTURTIUM	NASTURTIUM		NASTURTIUM	SCARIFY SEED	SCARIFIER	LAH #7 MANTLE	GOOD					THE LAH SCARIFIER WITH #7 MANTLE DID A GOOD JOB.
816	NICOTIANA	TABACUM	TOBACCO	INERT		INERT	REMOVE INERT MATERIAL	VIBRATORY	DECK=MEDIUM GRIT, 6 1/2 DEG FRONT-TO-BACK, 11 1/2 DEG LEFT-TO-RIGHT	GOOD	99		100		THE VIBRATOR SEPARATOR, PNEUMATIC SEPARATOR AND HAND SCREEN EFFECTIVELY REMOVED INERT PARTICLES WITH ONLY SMALL CROP LOSSES. THE MOST COMPLETE REMOVAL OF INERT PARTICLES WAS ACHIEVED WITH THE VIBRATOR SEPARATOR.
				INERT		INERT		PNEUMATIC		GOOD	99				
				INERT		INERT		SCREEN		GOOD	99				
799	OENATHERA		PRIMROSE	INERT		INERT	REMOVE SEED FROM SEED PODS.	BELT THRESHER	SEQ.ZERO CLEARANCE	GOOD				SAMPLES SENT TO SUBMITTER FOR EVALUATION.	EITHER THE BELT THRESHER OR SQUEEZE ROLLERS MAY BE USED TO REMOVE OENATHERA SEED FROM SEED PODS SUCCESSFULLY. SCREENING WILL CLEAN THE SEEDS WITH A MINIMUM OF CROP LOSS.
				INERT		INERT		SCREENS	SEQ.1/23 ROUND HOLE	GOOD					
				INERT		INERT		SCREEN	SEQ..027" ROUND HOLE	GOOD					
				INERT		INERT		OTHER	SQUEEZE ROLL: WOODEN ROLLERS, 1/16 CLEARANCE	GOOD					
957	OENOTHERA	BIENNIS	EVENINGPRIMROSE	ANTHEMIS	COTULA	DOGFENNEL	REMOVE DOGFENNEL	VIBRATORY		GOOD				VIBRATORYSEPARATOR WORKED VERY WELL BUT AT THE USUAL LOW CAPACITY	USE VIBRATORY SEPARATOR
1031	OENOTHERA	PALLIDA	OENOTHERA	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC		POOR				FORMERLY UNDER SAMPLE #736	
								VIBRATORY		POOR					
832	ONOBRYCHIS	VICIAEFOLIA	SAINFOIN	INERT		INERT	THRESH AND SEPARATE SAINFOIN SEED.	BELT THRESHER	SEQ. ZERO CLEARANCE	GOOD					SAINFOIN SEED CAN BE EFFECTIVELY REMOVED FROM THE HULL BY BELT THRESHING. SEPARATION OF CHAFF AND SEED CAN BE ACCOMPLISHED BY AN AIR COLUMN.
								PNEUMATIC	SEQ.	GOOD					
472	ONOBRYCHIS	VICIIFOLIA	SAINFOIN	INERT		INERT	REMOVE STEMS, BROME, TRASH, ALFALFA CURLS.	SCREENS	#14 RD OVER 6/64X3/4	GOOD					THE SCREENS SALVAGED 84% OF THE ORIGINAL MATERIAL AS CLEAN SEED. THE PNEUMATIC/SCREENS SEQUENCE SALVAGED 75% AS CLEAN SEED. THE THRESHER/PNEUMATIC SEQUENCE ALSO DID A GOOD JOB WITH THIS PROBLEM.
								PNEUMATIC	SEQ. #1	GOOD					
								SCREENS	SEQ. #1,#14 RD OVER 6/64X3/4	GOOD					
								BELT THRESHER	SEQ. #2	GOOD					
								PNEUMATIC	SEQ. #2	GOOD					
				BROMUS		BROME									
434	ORYZA	SATIVA	RICE	ORYZA	SATIVA	PECKY RICE KERNELS	REMOVE DISCOLORED "PECKY" KERNELS FROM MILLED RICE.	ELECTROSTATIC		POOR					NO SUCCESS WITH THIS PROBLEM.
				ORYZA	SATIVA	PECKY RICE KERNELS		OTHER	BOUNCE PLATE	POOR					
				ORYZA	SATIVA	PECKY RICE KERNELS		VIBRATORY		POOR					
				ORYZA	SATIVA	PECKY RICE KERNELS		MAGNETIC		POOR					
547	ORYZA	SATIVA	WHITE RICE	ORYZA	RUFIPOGON	RED RICE	REMOVE RED RICE	VIBRATORY	CROCUS CLOTH DECK	GOOD			100	PNEUMATIC, CHUTE, ELECTROSTATIC AND VELVET ROLL SEPARATORS YIELDED UNCONCLUSIVE OR UNSATISFACTORY RESULTS.	THE VIBRATOR SEPARATOR WAS VERY EFFCTIVE IN THIS SEPARATION.
				ORYZA	RUFIPOGON	RED RICE		MAGNETIC		POOR					
				ORYZA	RUFIPOGON	RED RICE		OTHER	SQUEEZE ROLLS	POOR					
552	ORYZA	SATIVA	RICE	ORYZA	RUFIPOGON	RED RICE	REMOVE RED RICE	OTHER	PRECISION GRADER, #7 1/4 SHELL					TRIALS WITH ELECTROSTATIC, VELVET ROLLS, BOUNCE PLATE AND SLIDE CHUTE SHOWED LITTLE TENDENCY FOR SEPARATION.	FRACTIONS WERE SENT TO SUBMITTER FOR INSPECTION.

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				ORYZA	RUFIPOGON	RED RICE		VIBRATORY	SANDPAPER DECK						
				ORYZA	RUFIPOGON	RED RICE		OTHER	SEQ.PRECISION GRADER						
				ORYZA	RUFIPOGON	RED RICE		VIBRATORY	SEQ.SANDPAPER DECK						
839	ORYZA	SATIVA	RICE-MEDIUM GRAIN	ORYZA	SATIVA	ROUGH RICE	SEPARATE ROUGH (IN-HULL) RICE FROM BROWN (OUT-OF-HULL) RICE.	SCREEN	#7 ROUND-HOLE	GOOD		95	96	THE SAMPLE CONSISTED OF ABOUT 50% OF EACH TYPE OF RICE. RELATED SAMPLE OF LONG-GRAIN RICE UNDER #1047.	NO SINGLE SEPARATOR COULD MAKE A TOTAL SEPARATION, BUT USED IN COMBINATION, SATISFACTORY RESULTS COULD PROBABLY BE ACHIEVED.
								INDENT DISC	SIZE EE	GOOD					
								ELECTROSTATIC	BELT-TYPE, 11 KV	FAIR		95	100		
								COLOR SORTER	VIOLET FILTER, WHITE BACKGROUND	GOOD			99		
1047	ORYZA	SATIVA	LONG-GRAINED RICE	ORYZA	SATIVA	ROUGH RICE	SEPARATE ROUGH (IN-HULL) RICE FROM BROWN (OUT-OF-HULL) RICE.	SCREEN	1/2X1/4 SLOTTED METAL	GOOD			99	THIS SAMPLE FORMERLY UNDER #839. SEE #839 FOR SAME PROBLEM WITH MEDIUM-GRAINED RICE.	NO SINGLE MACHINE MADE A TOTAL SEPARATION, IN COMBINATION, A SATISFACTORY SEPARATION COULD PROBABLY BE ACHIEVED. ALL SAMPLES WERE A MIXTURE OF ABOUT 50% OF EACH RICE.
								INDENT DISC	NO. A DISC	FAIR			89		
								ELECTROSTATIC		GOOD			99		
								COLOR SORTER	FILTER=47B, BKG=LIGHT GRAY, LIGHT SENS.=90, DELAY=28	FAIR			86		
319	ORYZA	SATIVA	SHORT GRAIN RICE	PASPALUM	DILATATUM	WATERGRASS	REMOVE WATERGRASS AND OTHER FOREIGN MATERIALS.	VIBRATORY	SEQ.	GOOD					THE VIBRATOR REMOVED THE WATERGRASS AND MUCH OF THE FOREIGN MATERIAL, THEN THE COLOR SORTER WAS USED TO REMOVE THE REST OF THE FOREIGN MATERIAL.
				FOREIGN		MATERIAL		COLOR SORTER	SEQ.	GOOD					
320	ORYZA	SATIVA	LONG GRAIN RICE	PASPALUM	DILATATUM	WATERGRASS	REMOVER WATERGRASS AND FOREIGN MATERIAL.	COLOR SORTER		GOOD					THE COLOR SORTER REMOVED WATERGRASS AND ALMOST ALL THE FOREIGN MATERIAL.
624	ORYZA	SATIVA	RICE				SEPARATE UNHULLED WILD RICE FROM HULLED FRACTION.								SEVERAL MACHINES, INCLUDING THE ELECTROSTATIC SEPARATOR, WERE TRIED, BUT WITH NO SUCCESS.
830	ORYZA	SATIVA	WILD RICE				SCARIFY WILD RICE ON ROTARY SCARIFIER.	SCARIFIER	ROTARY	POOR					BREAKAGE OF WILD RICE IN THE ROTARY SCARIFIER WAS EXCESSIVE.
1160	ORYZOPSIS	HYMENOIDES	INDIAN RICEGRASS	ORZYOPSIS	HYMENOIDES	UNSCARIFIED INDIAN RICEGRASS	TEST SCARIFICATION METHODS	SCARIFIER	LAH W/#14 SQ WW MANTLE FOR 2 MIN BATCH AND 230 GRAM LOT					TESTS OF SCARIFICATION PROCEDURES WAS THE OBJECT OF THIS WORK. THE LAH AND THE ROTARY SCARIFIER WERE TESTED EACH ON 230 GRAM LOTS. SOME BREAKAGE OF SEED OCCURRED IN THE ROTARY SCARIFIER	
				ORZYOPSIS	HYMENOIDES	UNSCARIFIED INDIAN RICEGRASS		SCARIFIER	ROTARY @ 500RPM AND 15 DEGREE SLOPE FOLLOWED BY AIR AND 1/18 RH SCREEN						
1144	ORYZOPZIS		RICE GRASS	ORYZOPSIS		UNTHRESHED RICE GRASS	TEST THRESHING PROCEDURES	SCARIFIER	PNEUMATIC,50PSI NO ABRASIVE	GOOD				SEVERAL TESTS OF THRESHING PROCEDURES WER	USE PNEUMAIC SCARIFIER WITH NO ABRASIVE CLOTH AND 50 PSI AIR FOR 20 TO 60 SECONDS ON 10 TO 20 GRAMS OF SEED TO REMOVE PUBESCENCE. FOR LARGER QUANTITIES USE LAH SCARIFIER WITH #14 OR #7 MESH MANTLE.
				ORYZOPSIS		UNTHRESHED RICE GRASS		SCARIFIER	LAH W/#7 AND #14 WW MANTLE	GOOD					
				ORYZOPSIS		UNTHRESHED RICE GRASS		BELT THRESHER	FINE BELT, 10:1 SPEED, -5MM CLEARANCE	FAIR					
837	PANICUM	VIRGATUM	SWITCHGRASS	ALOPECURUS		FOXTAIL	REMOVE FOXTAIL, BARNYARD GRASS AND MISC. WEEDS.	VIBRATORY	SANDPAPER DECK	FAIR	97	85	99	A SINGLE PASS WAS MADE ON THE VIBRATOR.	THE VIBRATOR SEPARATOR WILL REMOVE MOST OF THE CONTAMINANT SEED IN THIS SAMPLE.
				ECHINOCHLOA	CRUSGALLI	BARNYARD GRASS									
724	PANICUM	VIRGATUM	SWITCHGRASS	SETARIA	FABERII	GIANT FOXTAIL	REMOVE GIANT FOXTAIL, GREEN FOXTAIL AND BARNYARD GRASS	FRICTION	30 DEG VINYL BAR, NAUGAHYDE BELT	GOOD	96	75	99		ALL THREE MACHINES GAVE HIGH PURITY PRODUCTS, BUT THE MAGNETIC SEPARATOR LOST THE LEAST CROP (LESS THAN 10%). THE INDENT CYLINDER HAD A LOSS OF ALMOST 30%, BUT MIGHT DO BETTER IN A FULL-SIZED MACHINE.
				SETARIA	VIRIDIS	GREEN FOXTAIL		INDENT CYLINDER	#7 CYLINDER, 4RPM	FAIR	96		99		
				ECHINOCHLOA	CRUSGALLI	BARNYARD GRASS		MAGNETIC	#4 IRON POWDER	GOOD	96		99		
1191	PANICUM	VIRGATUM	SWITCHGRASS												
958	PAPAVER	RHOEAS	CORN POPPY	SISYMBRIUM	OFFICINALE	HEDGE MUSTARD	REMOVE HEDGE MUSTARD	INDENT CYLINDER	1MM	GOOD				HEDGE MSUTARD WAS COMPLETELY REMOVED USING 1MM POCKET	USE 1.O MM INDENT CYLINDER TO REMOVE HEDGE MUSTARD
609	PAPAVER		POPPY	MISC		MISC	REMOVE INERT MATERIAL AND WEED SEEDS (LAMBSQUARTER, PIGWEED, SORREL, AND MANY OTHERS).	PNEUMATIC	SEQ.					THE SAMPLE WAS REJECT MATERIAL FROM A GRAVITY TABLE.	PNEUMATIC SEPARATION FOLLOWED BY SCREENING, FRICTION OR VELVET ROLLS ALL YIELDED GOOD RESULTS, BUT THE BEST RESULTS WERE WITH PNEUMATIC AND FRICTION SEPARATION, CONSIDERING YIELD AND PURITY.
879	PAPAVER		POPPY				DETERMINE METHOD TO SEPARATE "GREY" SEEDS AND "BLUE" SEEDS.	FRICTION	SEQ. TWO PASSES	GOOD			99		TEXTURE DIFFERENCES BETWEEN THE "BLUE" AND "GREY" SEEDS ARE NOT GREAT ENOUGH TO MAKE A SEP
815	PARTHENIUM	ARGENTATUM	GUAYULE	INERT		INERT	REMOVE INERT MATERIAL: STEMS, ROUND AND FLAT BARK-LIKE MATERIAL.	SCREEN	SEQ. 1/15 RD HOLE					SUBMITTER REQUESTED 98% PURITY AND LOW CROP LOSS BECAUSE OF VALUE OF CROP.	MOST SEPARATORS WERE TRIED, B
				INERT		INERT		SCREEN	SEQ. 6X25 SLOTTDD						

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
				INERT		INERT		SCREEN	SEQ. 1/19 RD HOLE			78			
				INERT		INERT		VIBRATORY	SEQ.	FAIR			90		
654	PARTHENIUM	ARGENTATUM	GUAYULE				THRESH AND CLEAN GUAYULE SEED	OTHER	SEQ.HAND-THRESHED ON RUB BOARD						HAND-THRESHING FOLLOWED BY PNEUMATIC SEPARATION PRODUCED A VERY CLEAN SAMPLE WITH NEGLIGIBLE LOSS.
								PNEUMATIC	SEQ.	GOOD					
1141	PARTHENIUM		GUAYULE	INERT		INERT	SEPARTATION OF VIABLE SEED FROM INERT MATERIAL. LARGEST PORTION OF VIABLE SEED REQUIRED THRESHING TO REMOVE INERT PORTION OF SEED FROM VIABLE PORTION.	SEQUENCE						REFER TO PROBLEM SAMPLE FILE 1141 FOR A GOOD TIME.	
781	PASTINACA	SATIVA	PARSNIP	INERT		INERT	REMOVE INERT MATERIAL (STICKS) ON INDENT CYLINDER.	INDENT CYLINDER	#20 INDENT CYLINDER, 35 RPM	GOOD					A #20 INDENT CYLINDER DID A GOOD JOB OF LIFTING THE PARSNIP SEEDS FROM THE STICKS AT FAIRLY LOW SPEEDS OF ABOUT 35 RPM.
112	PASTINACA	SATIVA	PARSNIP				PERFORM CONVEYING TRIALS AND CHECK FOR SEED DAMAGE.							ALL TESTS CARRIED OUT WITH 1-1/2" PIPELINE (30' VERT, 26' HOR, 4 ELBO	PARSNIP FLOWED NICELY AT LOW VELOCITY IN LE
1098	PELARGONIUM		GERANIUM	PELARGONIUM		GERANIUM IN THE HULL	DEHULL	SCARIFIER	LAH W/#14 SQUARE WIRE MANTLE	GOOD				THIS MATERIAL REQUIRED SEVERAL RERUNS WITH SEPARATE AIR SEPARATIONS. DAMAGE APPEARED TO BE VERY LOW	USE LAH HULLER SCARIFIER WITH #14 SQUARE WIRE MANTLE.
1110	PELARGONIUM		GERANIUM	PELARGONIUM		GERANIUM IN THE HULL	REMOVE HULL AND CLEAN								
385	PELARGONIUM		GERANIUM				SCARIFY GERANIUM SEED.								THREE MAKESHIFT SCARIFIERS WERE SET UP AND TRIED: A SANDPAPER BELT, A PNEUMATIC, AND A REVOLVING SANDPAPER DISK TYPE.
433	PELARGONIUM		GERANIUM												
494	PELARGONIUM		GERANIUM	TRASH			THRESH AND CLEAN GERANIUM SEED.	BELT THRESHER	SEQ.0.011" CLRNC,5:1 BELT SPEED RATIO						USING THE ABOVE SEQUENCE, 56% BY WEIGHT OF THE ORIGINAL SAMPLE WAS RECOVERED AS HULLED SEED. BY RUNNING THE UNHULLED SEED FROM THE 1/13 ROUND-HOLE SCREEN THROUGH THE THRESHING/CLEANING PROCESS AGAIN, THE AMOUNT OF SEED RECOVERED INCREASED TO 66%.
				TRASH		TRASH		SCREEN	SEQ.20X20 WIRE MESH						
				HULLS		HULLS		PNEUMATIC	SEQ.375 FPM						
				UNHULLED		UNHULLED		SCREEN	SEQ.1/13 ROUND-HOLE						
155	PENNISETUM	CILIARE	BUFFALOGRASS	INERT		INERT	REMOVE ROCKS, STEMS, JOINTS AND MANURE CHIPS TO RAISE PURITY TO 90%.	ELECTROSTATIC		GOOD	72	61	86		THE ELECTROSTATIC AND PNEUMATIC SEPARATORS DID THE BEST JOB. THE PNEUMATIC SEPARATOR YIELDED 69% AT 92% PURITY AND THE ELECTROSTATIC YIELDED 81% AT 86% PURITY.
				INERT		INERT		PNEUMATIC		GOOD	72	79	92		
				INERT		INERT		VIBRATORY		FAIR	72	64	81		
				INERT		INERT		SCREEN		FAIR	72	68	87		
551	PENNISETUM	CILIARE	BUFFEL GRASS	INERT		INERT	REMOVE STRAW AND STEMS.	BELT THRESHER	SEQ.1.						FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.
				INERT		INERT		SCREENS	SEQ.1.#7 1/2 AND .027 RD						
				INERT		INERT		ELECTROSTATIC	SEQ.1	FAIR					
				INERT		INERT		BELT THRESHER	SEQ.2.						
				INERT		INERT		SCREENS	SEQ.2.#9 1/2 AND .027 RD						
				INERT		INERT		PNEUMATIC	SEQ.2.	GOOD					
735	PENNISETUM	CILIARE	BUFFEL GRASS	INERT		INERT	REMOVE INERT MATERIAL: STEMS AND LEAVES	AIR-SCREEN	SEQ: #15 ROUND HOLE TOP SCREEN, 4 7/8 X 1/2 SLOTTED BOTTOM SCREEN					THE AIR-SCREENED, BELT-THRESHED MATERIAL WAS ALSO TRIED ON A VIBRATOR SEPARATOR WITH GOOD RESULTS BUT HIGHER CONTAMINANT LEVELS.	BEST RESULTS WERE OBTAINED WITH THE AIR-SCREEN/THRESHER/AIR-SCREEN SEQUENCE. FAIR RESULTS WERE OBTAINED WITH THE AIR-SCREEN/THRESHER/VIBRATOR SEQUENCE.
				INERT		INERT		BELT THRESHER	SEQ:						
				INERT		INERT		AIR-SCREEN	SEQ: #8 ROUND HOLE TOP SCREEN, #13 ROUND HOLE BOTTOM SCREEN	GOOD					
495	PENNISETUM	RUPPELII	FOUNTAIN GRASS	TRASH		TRASH	THRESH AND CLEAN SEED.	BELT THRESHER	SEQ.5:1 SPEED, .011" CLEAR.						IN THE ABOVE SEQUENCE, THE LAST PNEUMATIC SEPARATOR TRIAL SEPARATED LIGHT FROM HEAVY, PRESUMABLY GERMINABLE, SEED. THE HEAVY SEED AMOUNTED TO 14.7% OF THE ORIGINAL SAMPLE WEIGHT.
				TRASH		TRASH		SCREEN	SEQ.30X30 WIRE MESH						
				TRASH		TRASH		PNEUMATIC	SEQ.375 FPM						
				SEED		SEED		PNEUMATIC	SEQ.550 FPM						
597	PENSTEMON		PENSTEMON	STEMS		STEMS	REMOVE STEMS AND LIGHT TRASH FROM WILD FLOWER SEED.	PNEUMATIC	SEQ.					SAMPLE LOT WAS SCREENINGS TO BE SALVAGED.	THE SEQUENCE OF PNEUMATIC SEPARATION FOLLOWED BY INDENT CYLINDER WORKED QUITE WELL WITH LITTLE CROP LOSS.
				STEMS		STEMS		INDENT CYLINDER	SEQ. 1/18X26 SPECIAL INDENT	GOOD					
676	PETROSELINUM	CRISPUM	PARSLEY	CIRSIUM	ARVENSE	CANADA THISTLE	REMOVE CANADA THISTLE	FRICTION	VINYL BAR, VINYL-SUEDE BELT	GOOD		90			THE FRICTION SEPARATOR EFFECTIVELY REMOVED THISTLE WITH A MINIMAL CROP LOSS. THE VELVET ROLLS, DRAPER, BLOWER, SCREENS AND GRAVITY TABLE WERE INEFFECTIVE.

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1235	PETROSELINUM	CRISPUM	PARSLEY	CIRSIUM	ARVENSE	CANADA THISTLE	REMOVE CANADA THISTLE	SCREEN	6X22 (0.033")	GOOD				SEVERAL SCREENS WERE TRIED. 6X22 DID A GOOD JOB OF REMOVING VISIBLE THISTLE SEED. SUBMITTER MAY TRY A 6X20 TO GET MORE OF THE THISTLE.	
713	PETROSELINUM	CRISPUM	PARSLEY	LOLIUM		RYEGRASS	DETERMINE INDENT SIZE TO REMOVE RYEGRASS	INDENT CYLINDER	#8 CYLINDER, 12 RPM	GOOD					A #8 CYLINDER GAVE THE BEST RESULTS WITH 1% CROP LOSS AND ONLY A TRACE OF RYEGRASS IN THE FINAL PRODUCT.
478	PETROSELINUM	CRISPUM	PARSLEY	PETROSELINUM	CRISPUM	PARSLEY	REMOVE LOW GERMINATION SEED	ELECTROSTATIC							GERMINATION RESULTS WERE NOT RETURNED BY THE SUBMITTER, BUT THE ELECTROSTATIC SEPARATOR DID NOT PIN ENOUGH OF THE MATERIAL TO MAKE A SIGNIFICANT DIFFERENCE ANYWAY.
779	PETROSELINUM	CRISPUM	PARSLEY	SCLEROTINA		FUNGUS	REMOVE SCLEROTIA PARTICLES								
306	PETROSELINUM	CRISPUM	PARSLEY	VARIOUS		VARIOUS	REMOVE NIGHTSHADE, LAMBSQUARTER, SOUR CLOVER, KNOTWEED, MALLOW, BARNYARDGRASS, WILD CHICORY, FOXTAIL, RED PIMPERNEL, BLACK MEDIC, SALTBRUSH, PEPPERGRASS, DOCK, BUCKHORN, MORNINGGLORY, ALFALFA AND RYEGRASS.	SCREEN	SEQ.6X20	GOOD					THE 6X20 SCREEN DROPPED NIGHTSHADE, LAMBSQUARTER AND BUCKHORN. THE VIBRATOR CARRIED DOCK, KNOTWEED, L	THE SAMPLE WAS SCREENED ON 6X20, HELD FRACTION RUN ON VIBRATOR, AND DOWNHILL FRACTION WAS RUBBED AND PUT ON DRAPER. PURITY ANALYSES WERE NOT MADE.
				VARIOUS		VARIOUS		VIBRATORY	SEQ.600 GRIT,FRACT OVER 6X20						
				VARIOUS		VARIOUS		OTHER	SEQ.RUBBED FRACT.						
				VARIOUS		VARIOUS		DRAPER	SEQ.DOWNHILL FRACTION RUBBED						
648	PETROSELINUM	CRISPUM	PARSLEY				REMOVE LOW GERMINATION SEED.	PNEUMATIC		POOR				GERMINATION OF THE LOT WAS 72% AND SUBMITTER NEEDED TO RAISE IT TO 80%.	NONE OF THE TECHNIQUES USED WAS ABLE TO CONCENTRATE THE GERMINATING SEED TO AT LEAST 80%.
								SCREEN	1/21 ROUND-HOLE	POOR					
								SCREEN	4X22 WIRE SLOT	POOR					
								GRAVITY		POOR					
677	PETROSELINUM	CRISPUM	PARSLEY			THISTLE	REMOVE THISTLE	FRICTION		POOR		50			RESULTS WERE NOT SATISFACTORY, BUT MIGHT BE IMPROVED WITH FURTHER RESEARCH.
785	PETROSELINUM	HORTENSE	PARSLEY	DAUCUS	CAROTA	WILD CARROT	REMOVE WILD CARROT AND BULL THISTLE	SCREEN	6X20 WOVEN WIRE	FAIR	99		100	THE PNEUMATIC SEPARATOR REMOVED NO BULL THISTLE. LESS SUCCESSFUL METHODS TRIED WERE ELECTROSTATIC, INDENT DISK AND INDENT CYLINDER.	A 6X20 SCREEN DID THE BEST JOB OF REMOVING THE THISTLE AND CARROT FROM PARSLEY.
				CIRSIUM	VULGARE	BULL THISTLE		PNEUMATIC		POOR	99		99		
784	PETROSELINUM	HORTENSE	PARSLEY	PETROSELINUM	HORTENSE	PARSLEY	REMOVE LOW-GERMINATION PARSLEY SEEDS.							THREE SAMPLES WERE OBTAINED BY PASSING THROUGH 1/17, 118 AND 119 HAND SCREENS. THESE FRACTIONS WERE THEN PASSED THROUGH THE PNEUMATIC SEPARATOR.	ALL FRACTIONS PASSED THROUGH THE SCREEDS AND PNEUMATIC SEPARATOR WERE SENT TO SUBMITTER FOR GERMINATION TESTS.
134	PETUNIA		PETUNIA	AMARANTHUS		PIGWEED	REMOVE PIGWEED	VELVET ROLL		GOOD					THE VELVET ROLL MADE A GOOD SEPARATION OF THE PIGWEED.
787	PHACELIA	NEMORALIS	PHACELIA	INERT		INERT	REMOVE INERT MATERIAL: STICKS, DUST, STONES.	AIR-SCREEN	SEQ.1/14 RD-HOLE TOP, 1/21 RD-HOLE BOTTOM	GOOD					SCREENING FOLLOWED BY PNEUMATIC SEPARATION WAS VERY EFFECTIVE IN CLEANING THE PHACELIA SAMPLE.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
381	PHALARIS	ARUNDINACEA	REED CANARYGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS AND ORCHARDGRASS FROM REED CANARYGRASS.	INDENT CYLINDER	#7 OR #8 CYLINDERS	GOOD					SATISFACTORY SEPARATIONS WERE MADE WITH #7 AND #8 INDENT CYLINDERS AND V4, V4-1/2 AND V5 INDENT DISCS.
						ORCHARDGRASS		INDENT CYLINDER	#7 OR #8 CYLINDERS	GOOD					
						RYEGRASS		INDENT DISC	V4,V4-1/2 OR V5 DISCS	GOOD					
						ORCHARDGRASS		INDENT DISC	V4,V4-1/2 OR V5 DISCS	GOOD					
451	PHALARIS	CANARIENSIS	CANARYGRASS	DACTYLIS	GLOMERATA	WILD OAT	REMOVE WILD OATS.	INDENT DISC	V6 DISC	GOOD					THE V6 INDENT DISC MADE AN EXCELLENT SEPARAT
				AVENA	FATUA	WILD OAT		SCREEN	#8 ROUND-HOLE	GOOD					
717	PHALARIS	CANARIENSIS	CANARYGRASS	LOLIUM			REMOVE WHEAT, FLAX AND RAPE SEED.	SCREENS							SUGGESTED STEPS: USE AIR
				DACTYLIS	GLOMERATA	ORCHARDGRASS		PNEUMATIC							
				MISC				INDENT CYLINDER	#6 CYLINDER			100			
				RAPE											
618	PHASEOLUS	AUREUS	MUNG BEAN	HULLS		HULLS	REMOVE HULLS	BELT THRESHER		POOR					TRIALS WERE UNSUCCESSFUL. A BELT THRESHER WITH SMOOTHER BELTS MIGHT WORK WITHOUT CRUSHING BEANS. ALSO, A COMMERCIAL SEED SCARIFYING-HULLING MACHINE MIGHT DO THE JOB.
652	PHASEOLUS	AUREUS	MUNG BEAN	SEED COATS		SEED COATS	REMOVE SEED COATS	BELT THRESHER	BEANS SOAKED IN WATER	POOR					ATTEMPTS WERE UNSUCCESSFUL.
								BELT THRESHER		POOR					
								OTHER	RUBBING IN SAND ON RUB BOARD						

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280	PHASEOLUS	LIMENSIS	BUSH BEAN (BLUE LAKE)	PHASEOLUS	LIMENSIS	DIRTY BUSH BEANS	REMOVE LOW GERMINATION BEANS (THE DIRTY ONES).	SCARIFIER	190RPM, 13 DEG, 1/2" CLEARANCE	GOOD					FAIR TO GOOD RESULTS WERE HAD WITH THE VELVET ROLLS WHICH THREW OUT THE ROUGHER TEXTURED DIRTY BEANS.
				PHASEOLUS	LIMENSIS	DIRTY BUSH BEANS		SCREENS	VARIOUS	POOR					
				PHASEOLUS	LIMENSIS	DIRTY BUSH BEANS		PNEUMATIC		POOR					
349	PHASEOLUS	LUNATUS	BABY LIMA BEAN	DIRT CLODS		DIRT CLODS	REMOVE DIRT CLODS.	SCREENS	SEQ.14/64X3/4 OVER #19	GOOD	98	88	100		A SEQUENCE USING A 14/64X3/4 SCREEN OVER A #19 SCREEN AND THE PNEUMATIC SEPARATOR REMOVED ALMOST ALL THE DIRT. A LENGTH SEPARATOR COULD REMOVE MOST OF THE REST OF THE DIRT. DIRT CAN ALSO BE REMOVED ON THE VELVET ROLLS.
				DIRT CLODS		DIRT CLODS		PNEUMATIC	SEQ.FRACT OVER #19 SCR	GOOD					
				DIRT CLODS		DIRT CLODS		VELVET ROLL							
1251	PHASEOLUS	VULGARIS	GREEN BEAN	INERT		INERT	REMOVE PEANUTS (SECTIONS OF THE POD CONTAINING BEAN SEED)	SCREEN	SEQ 12/64X3/4 OBLONG	GOOD		75		THIS SAMPLE REPRESENTED 300 LBS OF BREEDER SEED WITH SOME SEED STILL ENCASED IN A PORTION OF THE HULL. THESE PARTICELS, TERMED PEANUTS, NEED TO BE LOWERED IN PERCENT BEFORE THE MATERIAL CAN BE	USE A 12/64 X 3/4 OBLONG OPENING SCREEN FOLLOWED BY AIR SEPARATION TO REMOVE BEAN SEEDS IN THE HULL (PEANUTS).
				INERT		INERT		PNEUMATIC	SEQ ESM HIGHEST AIR VELOCITY	GOOD					
				INERT		INERT		GRAVITY	KAMAS, SMALL CLOTH DECK	FAIR					
345	PHASEOLUS		PINTO BEAN	CENCHRUS		SANDBUR	REMOVE SANDBUR	VELVET ROLL	120 RPM, 12.5 DEG	GOOD		100	100		THE VELVET ROLLS DID AN EXCELLENT JOB, REMOVING ALL THE SANDBUR WITH LESS THAN 1% CROP LOSS. THE 8/64X3/4 SCREEN ALSO DID WELL REMOVING ALL SANDBUR EXCEPT ONE SMALL PIECE WITH 1% LOSS.
				CENCHRUS		SANDBUR		SCREEN	8/64X3/4 SLOT	GOOD					
				CENCHRUS		SANDBUR		PNEUMATIC		FAIR					
				CENCHRUS		SANDBUR		OTHER	POLYURETHANE FOAM ROLLER	POOR					
521	PHASEOLUS		BEAN	CLODS		CLODS	REMOVE DIRT CLODS AND ROCKS.	SCREEN	SEQ. 1.#19 ROUND-HOLE	GOOD					BEST RESULTS WERE OBTAINED USING THE VELVET ROLLS FOLLOWED BY SCREENING. THIS YIELDED A 100% PURE SAMPLE WITH ONLY 6% LOSS.
				CLODS		CLODS		ELECTROSTATIC	SEQ. 1.	GOOD		96			
				CLODS		CLODS		VELVET ROLL	SEQ. 2.	GOOD					
				CLODS		CLODS		SCREEN	SEQ. 2.#18 ROUND-HOLE	GOOD		100	100		
718	PHASEOLUS		ALUBIA BEANS	CLODS		CLODS	REMOVE MUD CLODS.	FRICTION	4 FT WIDE CARPET BELT, BRUSH BAR	GOOD					THE FRICTION SEPARATOR MADE A VERY SELECTIVE SEPARATION OF THIS SAMPLE.
443	PHASEOLUS		CALIFORNIA PINK BEAN	CLODS/ROCKS		CLODS/ROCKS	REMOVE MUD CLODS AND ROCKS.	VELVET ROLL	REJECT FRACT RERUN	GOOD		100	100		THE VELVET ROLLS DID AN EXCELLENT JOB.
				CLODS/ROCKS		CLODS/ROCKS		SCREENS		POOR					
				CLODS/ROCKS		CLODS/ROCKS		OTHER	BOUNCE PLATE	POOR					
				CLODS/ROCKS		CLODS/ROCKS		PNEUMATIC		POOR					
				CLODS/ROCKS		CLODS/ROCKS		COLOR SORTER		FAIR					
350	PHASEOLUS		WHITE BEAN	DIRT CLODS		DIRT CLODS	REMOVE DIRT CLODS.	SCREENS	#16 OVER #13 ROUND-HOLE	GOOD	98	83	100		A #16 ROUND-HOLE SCREEN OVER A #13 ROUND-HOLE SCREEN WILL RECOVER 87% OF THE BEANS WITH ALMOST NO DIRT. MORE BEANS COULD BE RECOVERED BY LENGTH SEPARATING THE FRACTION THAT WENT THROUGH THE #13 SCREEN.
715	PHASEOLUS		FABA BEAN	INERT		INERT	REMOVE INERT MATERIAL (STEMS, DIRT CLOD, SMASHED BEANS, BEAN PODS) USING BULK PROCESS.	SCREENS	SEQ. #25 RD OVER 12/64X3/4	GOOD				ABOUT 2% OF THE BEANS IN THE FINAL PRODUCT WERE SOMEWHAT SMASHED OR HAD CRACKS. ATTEMPTS TO REMOVE THESE USING THE VELVET ROLLS AND FRICTION SEPARATOR WERE UNSUCCESSFUL.	FABA BEANS CAN BE EASILY CLEANED OF INERT MATERIAL USING SCREENS AND AIR. SLIGHTLY SMASHED OR CRACKED BEANS COULD NOT BE SEPARATED. FABA BEANS COULD BE COMMERCIALLY CLEANED USING THE ABOVE SCREENS AND AIR VELOCITY ON AN AIR-SCREEN MACHINE.
				INERT		INERT		PNEUMATIC	SEQ. 1125 FPM	GOOD					
1000	PHASEOLUS		WHITE BEANS	PHASEOLUS		STAINED BEANS	REMOVE STAINED BEANS THAT HAVE DIRT PRATICLES ATTACHED TO SEED COAT.	FRICTION	CARPET BELT, FOAM BAR	FAIR		50			THE FRICTION SEPARATOR REMOVED ABOUT HALF OF THE STAINED BEANS LEAVING THOSE THAT WERE STAINED BUT SMOOTH
15	PHASEOLUS		TOPCROP BEAN				DETERMINE MECHANICAL INJURY TO BEANS DURING PNEUMATIC CONVEYANCE.							FIVE SAMPLES WERE TRANSPORTED ABOUT 55' THROUGH A 1" LINE WITH TWO FLOW TYPES, REPEATED RUNS, TWO MOISTURE LEVELS AND TWO DISCHARGE METHODS. GERMINATION AND BROKEN SEED COUNTS WERE THEN COMPARED WITH CONTROL VALUES FOR LOTS NOT CONVEYED.	TEST OPERATIONS THAT APPEAR FAVORABLE WHEN THEIR GERMINATIONS ARE COMPARED WITH CONTROL GERMINATIONS (75.5% AVERAGE) ARE LEAN FLOW AND NO DROP (ONE RUN-75.5%, THREE RUNS-74.5%, FIVE RUNS-71%); A
46	PHLEUM	PRATENSE	TIMOTHY	ANTHEMIS	COTULA	DOG FENNEL	REMOVE DOG FENNEL, HEDGE MUSTARD, PIGWEED AND SHEEP SORREL.	DRAPER	PLASTIC BELT, 36FPM, 20DEG	FAIR				THIS SAMPLE HAD BEEN RUN TWICE ON AN AIR-SCREEN MACHINE, BUT STILL CONTAINED LARGE AMOUNTS OF THE ABOVE CONTAMINANTS.	THE DRAPER WITH PLASTIC BELT CAN REMOVE A LARGE AMOUNT OF THE HEDGE MUSTARD AND DOG FENNEL.
				SISYMBRIUM	OFFICINALE	HEDGE MUSTARD		VELVET ROLL		POOR					
				AMARANTHUS		PIGWEED		PNEUMATIC		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		GRAVITY		POOR					

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								INDENT CYLINDER		POOR					
156	PHLEUM	PRATENSE	TIMOTHY	ANTHEMIS	COTULA	DOGFENNEL	REMOVE DOGFENNEL	ELECTROSTATIC	PLASTIC BELT, 36FPM, 18 DEG	POOR	99	100	100	GRAVITY-NOT TRIED DUE TO INSUFFICIENT SEED. LENTH SEPARATOR-NOT TRIED DUE TO NO VISIBLE LENGTH DIFFERENCE BETWEEN THE SEEDS.	THE SAMPLE RESPONDED WELL TO THE DRAPER. TIMOTHY WAS REDUCED FROM .95% (10,350/LB) TO 50/LB WITH A CROP LOSS OF 15%.
				ANTHEMIS	COTULA	DOGFENNEL		SCREENS	ROUGH 3/8" SANDPAPER	FAIR	99	97	100		
				ANTHEMIS	COTULA	DOGFENNEL		VIBRATORY		POOR					
				ANTHEMIS	COTULA	DOGFENNEL		SCREENS		POOR					
				ANTHEMIS	COTULA	DOGFENNEL		PNEUMATIC		POOR					
				ANTHEMIS	COTULA	DOGFENNEL		VELVET ROLL		POOR					
								ELECTROSTATIC							
115	PHLEUM	PRATENSE	TIMOTHY	BARBAREA		WINTERCRESS	REMOVE WINTERCRESS AND BUCKHORN PLANTAIN. THIS SAMPLE WAS SCREENINGS WHICH ALSO CONTAINED OTHER WEEDS AND INERT MATERIAL.	VIBRATORY	VERY FINE SANDPAPER DECK	GOOD				THE PNEUMATIC, DRAPER, ELECTROSTATIC AND MAGNETIC SEPARATORS WERE NOT EFFECTIVE IN PERFORMING THIS SEPARATION.	BEST RESULTS, BY FAR, WERE WITH THE VIBRATOR SEPARATOR. RERUNNING THE SAMPLE, CLEANED IT FURTHER. THE AIR-SCREEN MACHINE DID A FAIR JOB. NO QUANTITATIVE RESULTS AVAILABLE.
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		VIBRATORY	VERY FINE SANDPAPER DECK	GOOD					
				BARBAREA		WINTERCRESS		AIR-SCREEN	26X26 W/DAMS, 360RPM	FAIR					
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		AIR-SCREEN	26X26 W/DAMS, 360RPM	FAIR					
218	PHLEUM	PRATENSE	TIMOTHY (CLIMAX)	LYCHNIS		COCKLE	REMOVE COCKLE	INDENT CYLINDER	1/19X24 CYLINDER	FAIR		98			ALL TRIALS FAILED TO GIVE SAT
				LYCHNIS		COCKLE		INDENT CYLINDER	1/18X24 CYLINDER	FAIR		96			
				LYCHNIS		COCKLE		INDENT CYLINDER	1/17X24 CYLINDER	FAIR		91			
				LYCHNIS		COCKLE		SCREEN	.032"ROUND-HOLE	POOR		66			
				LYCHNIS		COCKLE		SCREENS	.041" & .038" ROUND-HOLE	POOR					
				LYCHNIS		COCKLE		VIBRATORY		POOR					
				LYCHNIS		COCKLE		ELECTROSTATIC		POOR					
219	PHLEUM	PRATENSE	TIMOTHY (LORAIN)	LYCHNIS	ALBA	WHITE COCKLE	REMOVE WHITE COCKLE	VIBRATORY	280 GRIT DECK	POOR					BEST RESULTS YIELDED BY THE VIBRATOR (87% OF LOT WITH 190 COCKLE/LB) AND THE SCREEN/INDENT/VIBRATOR SEQUENCE. HOWEVER, RESULTS IN ALL CASES GREATLY EXCEEDED THE REQUIRED 9 COCKLE/LB.
				LYCHNIS	ALBA	WHITE COCKLE		SCREEN	SEQ..032"ROUND HOLE	POOR		80			
				LYCHNIS	ALBA	WHITE COCKLE		INDENT CYLINDER	SEQ.1/19X24 CYLINDER, THRU FRACT FROM SCR.	POOR		50			
				LYCHNIS	ALBA	WHITE COCKLE		VIBRATORY	SEQ.REJECT FRACT FROM INDENT	POOR					
				LYCHNIS	ALBA	WHITE COCKLE		VELVET ROLL	100-140 RPM	POOR					
				LYCHNIS	ALBA	WHITE COCKLE		MAGNETIC		POOR					
220	PHLEUM	PRATENSE	TIMOTHY (CLIMAX)	LYCHNIS		COCKLE	REMOVE COCKLE.	SCREEN	SEQ..038"ROUND-HOLE						NO RESU
				LYCHNIS		COCKLE		INDENT CYLINDER	SEQ.1/19 X 24, THRU FRACT FROM SCR	POOR					
				LYCHNIS		COCKLE		VELVET ROLL	CANVAS AND PLASTIC BELTS	POOR					
				LYCHNIS		COCKLE		VIBRATORY	280 GRIT DECK	POOR					
340	PHLEUM	PRATENSE	CLIMAX TIMOTHY	LYCHNIS	ALBA	WHITE COCKLE	REMOVE WHITE COCKLE	VIBRATORY	280 GRIT DECK	GOOD	100		100	THIS LOT CONTAINED 539 COCKLE/LB AND 1014 CATCHFLY/LB. SINCE THE OSU SEED TESTING LAB COULD NOT DISTINGUISH BETWEEN THE TWO, THEY WERE CONSIDERED TOGETHER.	BEST RESULTS OBTAINED WITH THE VIBRATOR. BASED ON SEED MEASUREMENTS, A .035" ROUND-HOLE SCREEN WOULD BE THE IDEAL SIZE FOR THIS SAMPLE (INSTEAD OF THE .038" WHICH WAS AVAILABLE) IN THE SCREEN/INDENT CYLINDER/VIBRATOR SEQUENCE.
				LYCHNIS	ALBA	WHITE COCKLE		INDENT CYLINDER	.052"DIA X .019"DEEP CYLINDER	FAIR	100		100		
				LYCHNIS	ALBA	WHITE COCKLE		SCREEN	SEQ..038 ROUND-HOLE		100				
				LYCHNIS	ALBA	WHITE COCKLE		INDENT CYLINDER	SEQ..052"DIA X .019"DEEP CYLINDER						
				LYCHNIS	ALBA	WHITE COCKLE		VIBRATORY	SEQ.	FAIR			100		
366	PHLEUM	PRATENSE	TIMOTHY	LYCHNIS	ALBA	WHITE COCKLE	REMOVE COCKLE AND MUSTARD SEED.								BASED ON SEED MEASUREMENTS, A .03
				BRASSICA		MUSTARD									
367	PHLEUM	PRATENSE	TIMOTHY	LYCHNIS	ALBA	WHITE COCKLE	REMOVE COCKLE	SCREEN	SEQ..035" ROUND HOLE						THE ABOVE SEQUENCE USING THE .035" ROUND HOLE SCREEN TO REMOVE LARGE COCKLE AND THEN THE .050"X.019" INDENT CYLINDER TO REMOVE SMALL COCKLE IS THE RECOMMENDED PROCEDURE FOR THIS MIXTURE.
				LYCHNIS	ALBA	WHITE COCKLE		INDENT CYLINDER	SEQ..050"X.019" INDENT, THRU SCREEN FRACT						
404	PHLEUM	PRATENSE	TIMOTHY	LYCHNIS	ALBA	WHITE COCKLE	REMOVE WHITE COCKLE	SCREEN	SEQ..035" ROUND-HOLE	FAIR		60			BEST RESULTS WERE WITH A .035" ROUND-HOLE SCREEN FOLLOWED BY INDENTING WITH A .055" DIA X .024" DEEP CYLINDER. ALTHOUGH 98% OF THE COCKLE WAS REMOVED, THIS WAS NOT ENOUGH, AND CROP LOSS WAS HIGH.
				LYCHNIS	ALBA	WHITE COCKLE		INDENT CYLINDER	SEQ..055"DIA X .024"DEEP POCKET	FAIR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
232	PHLEUM	PRATENSE	TIMOTHY	MISC. SEEDS		MISC. SEEDS	REMOVE OTHER CROP SEEDS AND NOXIOUS WEEDS.	SCREENS	SEQ..038RH/32X32W/6X28W	GOOD			100		A 74% YIELD WITH A PURITY OF 99.7% WAS OBTAINED WITH THE ABOVE SCREENING SEQUENCE FOLLOWED BY A VIBRATION SEPARATION.
				MISC. SEEDS		MISC. SEEDS		VIBRATORY	SEQ.HELD FRACT FROM 6X28	GOOD			100		
229	PHLEUM	PRATENSE	TIMOTHY	POA		BLUEGRASS	REMOVE BLUEGRASS, VELVETGRASS AND SORREL TO MEET CERTIFICATION STANDARDS.	SCREENS	.038 RH, 32X32 WW, 6X28 WW	GOOD				THESE RESULTS WERE BASED ON A SEQUENCE OF SCREENS TO REMOVE ALL THREE CONTAMINANTS. THE THROUGH PORTION	USE .038 RH, 32X32 WW, 6X28 WW IN SEQUENCE TO REMOVE POA SPP., HOLCUS LANATUS, AND RUMEX SPP.
				HOLCUS	LANATUS	VELVETGRASS		SCREENS	.038 RH, 32X32 WW, 6X28 WW	GOOD					
				RUMEX		DOCK		SCREENS	.038 RH, 32X32 WW, 6X28 WW	GOOD					
231	PHLEUM	PRATENSE	TIMOTHY	POA		BLUEGRASS	REMOVE BLUEGRASS, VELVETGRASS AND SORREL.	SCREENS	.038 RH/32X32 WW/6X28 WW	GOOD					THE 6X28 BOTTOM SCREEN HELD 70% OF TH
				HOLCUS	LANATUS	VELVETGRASS		SCREENS	.038 RH/32X32 WW/6X28 WW	GOOD					
				RUMEX		SORREL		SCREENS	.038 RH/32X32 WW/6X28 WW	GOOD					
157	PHLEUM	PRATENSE	TIMOTHY	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL	INDENT CYLINDER	1/19X24 GA CYLINDER	FAIR				GRAVITY NOT TRIED-INSUFFICIENT SEED.	THE INDENT CYLINDER LIFTED SORREL NICELY, BUT ALONG WITH MANY SHORT TIMOTHY. A 1/25X24 GA CYLINDER SHOULD BE ABOUT RIGHT FOR THIS SEPARATION.
				RUMEX	ACETOSELLA	SHEEP SORREL		PNEUMATIC		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		DRAPER		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		ELECTROSTATIC		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		VELVET ROLL		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		SCREENS		POOR					
809	PHLEUM	PRATENSE	TIMOTHY	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL	SCREEN	1/25 ROUND-HOLE	GOOD					A 1/25 ROUND HOLE SCREEN DID AN ADEQUATE JOB OF SEPARATING SHEEP SORREL FROM TIMOTHY.
877	PHLEUM	PRATENSE	TIMOTHY	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL	VIBRATORY		GOOD					TIMOTHY CAN BE CLEANED AT LOW CAPACITY ON THE VIBRATOR SEPARATOR.
								SCREEN	22X22 WIRE MESH AND .038 RD HOLE	FAIR		75			
221	PHLEUM	PRATENSE	TIMOTHY (CLIMAX)	TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER	REMOVE ALSIKE CLOVER AND WHITE COCKLE.	SCREEN	SEQ..038"ROUND-HOLE	GOOD					BEST RESULTS WITH A SCREEN/INDENT CYLINDER/VIBRATOR SEQUENCE. 87% OF THE ORIGINAL LOT WAS SALVAGED WITH 9 COCKLE/LB.
				LYCHNIS	ALBA	WHITE COCKLE		SCREEN	SEQ..038"ROUND-HOLE	GOOD					
				LYCHNIS	ALBA	WHITE COCKLE		INDENT CYLINDER	SEQ.1/19X26, 30 MIN, THRU FRACT FROM SCR.	GOOD					
				TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER		INDENT CYLINDER	SEQ.1/19X26, 30 MIN, THRU FRACT FROM SCR.						
				LYCHNIS	ALBA	WHITE CLOVER		VIBRATORY	SEQ. 280 GRIT, REJECT FROM INDENT	GOOD					
				TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER		VIBRATORY	SEQ. 280 GRIT, REJECT FROM INDENT						
222	PHLEUM	PRATENSE	TIMOTHY (CLIMAX)	TRIFOLIUM		CLOVER	REMOVE CLOVER, COCKLE AND MINT.								PROCESSING TECHNIQUE WAS THE SAME ONE USED FOR #221. ADDITIONAL VIBRATOR TRIALS AND RERUNS WERE CARRIED OUT WITH BEST RESULTS BEING A 60% YIELD WITH 50 COCKLE/LB.
				LYCHNIS		COCKLE									
				MENTHA		MINT									
783	PHLEUM	PRATENSE	TIMOTHY	VARIOUS		VARIOUS	REMOVE VARIOUS WEEDS INCLUDING FESCUE, BENTGRASS, VETCH DOCK, ETC. BY SCREEN AND GRAVITY TABLE.	AIR-SCREEN	SEQ.1/24 RD. SCALPER, 6X20 TOP SCR., 30X30 BOTTOM SCR.	GOOD					REMOVAL OF MANY OF THE CONTAMINANT SEEDS IN THIS MIXTURE IS POSSIBLE BY USE OF THE AIR SCREEN MACHINE AND GRAVITY TABLE.
								GRAVITY	SEQ.	GOOD					
504	PHLEUM	PRATENSE	TIMOTHY				RUN SEEDS THROUGH CONVEYING SYSTEM TO DETERMINE DAMAGE TO SEEDS.								TWO SEED LOTS WERE SENT THROUGH THE CONVEYING SYSTEM AT THREE DIFFERENT CONVEYING CONDITIONS. ALL FRACTIONS WERE SENT TO SUBMITTER FOR GERMINATION TESTS.
829	PHLEUM	PRATENSE	TIMOTHY												
459	PHLOX		PHLOX	CHRYSANTHEMUM		CHRYSANTHEMUM	REMOVE CHRYSANTHEMUM	PNEUMATIC	SEQ.	GOOD				THE VIBRATOR SALVAGED 55% OF THE PHLOX WITH VERY FEW CHRYSANTHEMUM PRSENT.	THE BLOWING/SCREENING SEQUENCE GAVE THE BEST RESULTS, SALVAGING 80% OF THE PHLOX WITH NEARLY ALL CHRYSANTHEMUM REMOVED.
				CHRYSANTHEMUM		CHRYSANTHEMUM		SCREENS	SEQ.4X20,6X21,4X22SLOTS,1/14RH	GOOD					
				CHRYSANTHEMUM		CHRYSANTHEMUM		VIBRATORY		FAIR					
				CHRYSANTHEMUM		CHRYSANTHEMUM		ELECTROSTATIC		POOR					
				CHRYSANTHEMUM		CHRYSANTHEMUM		VELVET ROLL		POOR					
456	PHLOX		PHLOX	IBERIS		CANDYTUFT	REMOVE CANDYTUFT	VIBRATORY		GOOD		96			THE VIBRATOR YIELDED THE BEST RESULTS, REMOVING 96% OF THE CANDYTUFT WITH 12% LOSS.
				IBERIS		CANDYTUFT		VELVET ROLL		POOR					
				IBERIS		CANDYTUFT		ELECTROSTATIC		POOR					
				IBERIS		CANDYTUFT		PNEUMATIC		POOR					
				IBERIS		CANDYTUFT		SCREEN		POOR					
				IBERIS		CANDYTUFT		OTHER	INCLINED CHUTE	POOR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
				IBERIS		CANDYTUFT		MAGNETIC		POOR					
458	PHLOX		PHLOX	SOLANUM		NIGHTSHADE	REMOVE NIGHTSHADE	SCREENS	1/15 AND 6X24 SLOT	FAIR		91			BEST RESULTS WITH A 1/15 ROUND-HOLE SCREEN AND A 6X24 SLOTTED SCREEN. NEARLY THE SAME JOB COULD BE DONE WITH A COMBINATION OF SCREENING AND BLOWING.
				SOLANUM		NIGHTSHADE		ELECTROSTATIC		POOR					
				SOLANUM		NIGHTSHADE		VIBRATORY		POOR					
				SOLANUM		NIGHTSHADE		PNEUMATIC		POOR					
				SOLANUM		NIGHTSHADE		VELVET ROLL		POOR					
1186	PICEA	PUNGENS	BLUE SPRUCE												
1026	PIMPINELLA	ANISUM	ANISE	ECHINOCHLOA	CRUSGALLI	BARNYARDGRASS	REMOVE BARNYARDGRASS							HIGH VALUE. ONE TON LOT.	
106	PINUS	ELLIOTTII	SLASH PINE												
1055	PINUS	LAMBERTIANA	SUGAR PINE	INERT		INERT	REMOVE NEEDLES, CONE PIECES, PITCH AND TWIGS	FRICTION		GOOD				THE VIBRATOR SEPARATOR WAS UNSUCCESSFUL. THE BOUNCE PLATE AND INCLINED DRAPER SHOWED LIMITED SUCCESS. THIS PROBLEM SAMPLE ORIGINALLY #662. SEE #662 AND #1054 FOR SAME PROBLEM WITH DOUGLAS FIR AND WESTERN WHITE PINE.	THE FRICTION SEPARATOR WORKED VERY WELL. THE REJECT MATERIAL WAS RERUN FOUR TIMES, RECOVERING SEED EACH TIME.
1054	PINUS	MONTICOLA	WESTERN WHITE PINE	INERT		INERT	REMOVE NEEDLES, CONE PIECES, PITCH AND TWIGS							VIBRATOR, BOUNCE PLATE AND INCLINED DRAPER WERE UNSATISFACTORY. THIS PROBLEM SAMPLE FORMERLY #662. SEE #662 AND #1055 FOR SAME PROBLEM WITH DOUGLAS FIR AND SUGAR PINE.	THE FRICTION SEPARATOR WORKED VERY WELL. THE REJECT MATERIAL WAS RERUN FOUR TIMES, SALVAGING SEED EACH TIME.
1088	PINUS	MONTICOLA	WESTERN WHITE PINE	INERT		PITCH	REMOVE PITCH AND CONE PARTS	FRICTION	FIRM FOAM BAR	BEST	75	100	100	THE COMBINATION OF ELECTROSTATIC AND SCREENING WAS I	USE FICTION SEPARATOR WITH FIRM FOAM SEPARATOR BAR TO REMOVE PITCH PARTICLES.
				INERT		PITCH		MAGNETIC	NO WATER	POOR	75	50	50		
				INERT		PITCH		ELECTROSTATIC	LIFTING POSITION	GOOD	75	95	97		
				INERT		PITCH		SCREEN	LAST IN SEQUENCE SEE NOTES	GOOD	97	60	99		
				INERT		CONE PARTS		INDENT CYLINDER	7.0MM DRUM	FAIR	75	80	60		
661	PINUS	PONDEROSA	PONDEROSA PINE				SIZE SEEDS BY LENGTH								THE SEEDS WERE LENGTH GRADED BY V6 1/2 AND M INDENT DISKS AND #16 INDENT CYLINDER. FRACTIONS WILL BE EVALUATED BY SUBMITTER
101	PINUS	TAEDA	LOBLOLLY PINE	EMPTIES		EMPTY SEEDS	REMOVE EMPTY SEEDS.	VIBRATORY		POOR					THE PNEUMATIC SEPARATOR DID A VERY GOOD JOB OF REMOVING LIGHT EMPTY SEEDS FROM FULL ONES.
				EMPTIES		EMPTY SEEDS		PNEUMATIC		GOOD	34	99	99		
105	PINUS	TAEDA	LOBLOLLY PINE	PINUS	TAEDA	EMPTY SEEDS	REMOVE EMPTY SEEDS	PNEUMATIC		GOOD	56	100	100		THE PNEUMATIC SEPARATOR PERFORMED A VERY GOOD SEPARATION.
581	PINUS	TAEDA	LOBLOLLY PINE												
176	PIPER	NIGRUM	BLACK PEPPER	PIPER	NIGRUM	BLACK PEPPER	REMOVE ROUND, SMOOTH, LIGHT-COLORED PEPPERCORNS (THE DESIRED CROP) FROM ROUND, ROUGH, DARK-COLORED PEPPERCORNS.	DRAPER	PLASTIC BELT, 44FPM, 7.5DEG	GOOD	4.3	97	58		THE SCREEN/PNEUMATIC SEQUENCE
				PIPER	NIGRUM	BLACK PEPPER		DRAPER	PLASTIC BELT, 40FPM, 6.5DEG	GOOD	4.3	99	85		
				PIPER	NIGRUM	BLACK PEPPER		SCREEN	SEQ.10.5/64" SCREEN	GOOD					
				PIPER	NIGRUM	BLACK PEPPER		PNEUMATIC	SEQ.	GOOD	4.3		100		
				PIPER	NIGRUM	BLACK PEPPER		VIBRATORY	VARIOUS DECKS	POOR					
				PIPER	NIGRUM	BLACK PEPPER		VELVET ROLL	10DEG, 225RPM	POOR	4.3	92	24		
				PIPER	NIGRUM	BLACK PEPPER		PNEUMATIC		POOR					
19	PISTACA	VERA	PISTACHIO				SEPARATE CRACKED FROM WHOLE NUTS: SEE ORIGINAL REPORT.								
695	PISTACIA	VERA	PISTACHIO				SEPARATE CRACKED PISTACHIO NUTS FROM UNCRACKED ONES.	FRICTION							VARIOUS BELT-BAR COMBINATIONS WERE TRIED AND THE FRICTION SEPARATOR SHOWED POTENTIAL. AN EXTREMELY AGGRESSIVE CARPET WITH A FAIRLY STIFF FOAM BAR IS RECOMMENDED.
835	PISUM	SATIVUM	PEA	DIRT		DIRT	REMOVE DIRT CLODS	FRICTION	FINE WEAVE/CLIPPED NAP CARPET, FOAM WEATHERSTRIP BAR	GOOD					THE FRICTION SEPARATOR WORKS WELL IN SEPARATING DIRT CLODS FROM PEAS.
197	PISUM	SATIVUM	SPLIT PEAS	INERT		INERT	REMOVE ROCKS, STICKS AND GLASS	PNEUMATIC							THE PNEUMATIC SEPARATOR REMOVED MOST, BUT NOT ALL, OF THE CONTAMINANTS.
1214	PISUM	SATIVUM	PEA	INERT				SEQUENCE	20/64RH, 15/64RH, AIR, GRAVITY	GOOD		100		THIS REQUEST WAS TO DETERMINE APPROXIMATE CLEANOUT OF FIELD RUN PEAS.	
716	PISUM	SATIVUM	PEA	MISC		MISC	REMOVE VARIOUS WEED SEED SAVING THE RAPE SEED. TO BE REMOVED ARE OATS, BARLEY, WEEDS, STRAW AND INERT MATERIAL.	SCREEN	SEQ. 8/64X3/4 SLOT	GOOD				TO S	THE ABOVE SEQUENCE YIELDS A 99.6% PURE PEA SAMPLE WHEN THE WHOLE PEAS AND SPLIT PEAS ARE MIXED. THIS COULD BE ACCOMPLI
				INERT		INERT		PNEUMATIC	SEQ. 1110 FPM	GOOD			100		
				MISC		MISC		INDENT CYLINDER	SEQ. #16 CYLINDER	GOOD			100		

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40	PISUM	SATIVUM	PEAS	PHASEOLUS		BEANS	REMOVE BEANS	VELVET ROLL		GOOD					PEAS WERE SOMEWHAT WRINKLED ENABLING THEM TO BE SEPARATED FROM THE BEANS, BUT AN ENTIRELY CLEAN PRODUCT COULD NOT BE OBTAINED.
64	PISUM	SATIVUM	PEA	PISUM	SATIVUM	CRACKED PEAS	REMOVE PEAS WITH CRACKED COATS.	VELVET ROLL		POOR					NO SATISFACTORY METHOD WAS FOUND TO REMOVE PEAS WITH CRACKED SEED COATS.
				PISUM	SATIVUM	CRACKED PEAS		SPIRAL		POOR					
				PISUM	SATIVUM	CRACKED PEAS		PNEUMATIC		POOR					
				PISUM	SATIVUM	CRACKED PEAS		MAGNETIC		POOR					
				PISUM	SATIVUM	CRACKED PEAS		VIBRATORY		POOR					
				PISUM	SATIVUM	CRACKED PEAS		ELECTROSTATIC		POOR					
352	PISUM	SATIVUM	PEA	PISUM	SATIVUM	CRACKED-COAT PEAS	REMOVE PEAS WITH CRACKED COATS.	MAGNETIC	IRON POWDER	POOR					THE PEAS WERE WERE PROCESSED IN A DRY STATE AND IN A MOISTENED STATE, BUT NO TRIALS WERE SUCCESSFUL.
				PISUM	SATIVUM	CRACKED-COAT PEAS		PNEUMATIC		POOR					
				PISUM	SATIVUM	CRACKED-COAT PEAS		OTHER	BOUNCE PLATE	POOR					
1199	PISUM	SATIVUM	PEA	PISUM	SATIVUM	LOW GERM PEA	IMPROVE GERMINATION BY USE OF SCREENS AND GRAVITY TABLE	SCREENS	SEQ	FAIR				THIS WORK INVOLVED SEVERAL SAMPLES OF PEA SEED WITH VARYING GERMINATION PERCENTAGES. SUBMITTER REQUESTED THAT THE MATERIAL BE SCREENED AND GRAVITY SEPARATED AND THEN GERM TESTED AT THE OREGON	
				PISUM	STAIVUM	LOW GERM PEA		GRAVITY	SEQ	FAIR					
890	PISUM	SATIVUM	SWEET PEA	TROPAEOLUM		NASTURTIUM	REMOVE NASTURTIUM	FRICTION	CARPET BELT, SCOTCH-BRITE BAR	GOOD		100	100		THE FRICTION SEPARATOR REMOVED ALL THE NASTURTIUM AND MANY SHRIVELED AND CRACKED PEAS.
72	PISUM	SATIVUM	GREEN SCOTCH PEAS				EVALUATE DAMAGE TO PEAS AFTER CONVEYANCE IN THE USDA DENSE-PHASE CONVEYOR.							CONVEYING TRIALS WERE CARRIED OUT WITH A 1 1/2" PIPE SYSTEM THAT HAD A 30' VERTICAL RISE AND AN 8' HORIZONTAL RUN. SOME LOTS WERE DISCHARGED INTO A HOPPER AND FELL 24' INTO A SACK. ALL TESTS WERE BATCH OPERATIONS.	RESULTS SHOWED THAT NO GERMINATION DAMAGE OCCURED WHICH COULD BE ATTRIBUTED TO THE HANDLING BY CONVEYOR. LOTS THAT PASSED THROUGH THE AIRLOCK DID SHOW A SLIGHTLY HIGHER AMOUNT OF BROKEN PEAS.
73	PISUM	SATIVUM	WHOLE ALASKA PEAS				EVALUATE DAMAGE TO PEAS AFTER CONVEYANCE IN THE USDA DENSE-PHASE CONVEYOR.							CONVEYING TRIALS WERE CARRIED OUT IN A 1 1/2" PIPE SYSTEM CONSISTING OF A 30' VERTICAL RISE AND AN 8' HORIZONTAL RUN. SOME LOTS WERE DISCHARGED INTO A HOPPER AND THEN FELL 24' INTO A SACK. ALL TESTS WERE BATCH OPERATIONS.	NO GERMINATION DAMAGE OCCURED THAT COULD BE ATTRIBUTED TO HANDLING. LOTS THAT PASSED THROUGH THE AIRLOCK DID SHOW A SLIGHTLY HIGHER AMOUNT OF DAMAGED PEAS.
152	PISUM	SATIVUM	GREEN PEAS				DETERMINE AMOUNT OF DAMAGE TO PEAS DUE TO HANDLING IN USDA FLUIDIZED CONVEYOR. CONVEYOR CONSISTS OF A 56' RUN OF 1-1/2" ALUMINUM TUBING.							DENSE-PHASE, 9-10PSI TO START, THEN 6PSI: BREAKAGE=5% LEAN-PHASE, 2PSI, THROUGH AIR-LOCK, 26' DROP: BREAKAGE=3% LEAN-PHASE, 2PSI, THROUGH AIR-LOCK, NO DROP: BREAKAGE=2% LEAN-PHASE, 2PSI, BYPASS AIR-LOCK, NO DROP: BREAKAGE=1%	THE LOT COULD BE TRANSPORTED WITH LITTLE OR NO DAMAGE. MOST OF THE DAMAGE OBSERVED WAS DUE TO THE AIR-LOCK AND COULD BE REDUCED OR ELIMINATED WITH A DROP-THROUGH LOCK WITH FLEXIBLE BLADE TIPS AND A WIPER AT THE FEED INLET.
153	PISUM	SATIVUM	YELLOW PEA				DETERMINE AMOUNT OF DAMAGE TO PEAS DURING HANDLING BY USDA FLUIDIZED CONVEYOR CONSISTING OF 56' OF 1-1/2"ALUMINUM TUBING.							DENSE PHASE, 9-10PSI AT START, THEN 6 PSI: 5% BREAKAGE LEAN PHASE, THROUGH AIR-LOCK, 26' DROP, 2PSI: 3% BREAKAGE LEAN PHASE, THROUGH AIR-LOCK, NO DROP, 2PSI: 2% BREAKAGE LEAN PHASE, BYPASS AIR-LOCK, NO DROP, 2PSI: 1% BREAKAGE	THIS LOT CAN BE TRANSPORTED READILY WITH LITTLE OR NO BREAKAGE. MOST OF THE BREAKAGE OBSERVED WAS DUE TO THE AIRLOCK AND COULD BE REDUCED OR ELIMINATED WITH A DROP-THROUGH LOCK WITH FLEXIBLE BLADE TIPS AND A WIPER AT THE FEED INLET.
474	PISUM	SATIVUM	SMOOTH PEAS				DETERMINE DAMAGE TO SMOOTH PEAS DURING FLUIDIZED CONVEYING.								TESTED AT BLOWER SPEED OF 860 RPM, AIR PRESSURE AT 3-5 PSIG AND AUX AIR VALVE OPEN 1 1/2 TURNS. DAMAGE OCCURED TO 2% OF THE PEAS (BY WEIGHT) POSSIBLY BECAUSE OF THE ROTARY AIRLOCK.
949	PISUM		PEA	PISUM		PEA	REMOVE HOLLOW-HEART PEA	PNEUMATIC		FAIR				NONE OF THE METHODS TESTED WERE ACCEPTABLE	INCONCLUSIVE
				PISUM		PEA		FRICTION		POOR					
				PISUM		PEA		SCREEN	18/64 RH	FAIR					
1081	PISUM		PEA	UNHULLED		UNHULLED	SEPARATE HULLED AND UNHULLED PEAS.	VIBRATORY	SANDBLASTED ALUMINUM DECK	GOOD	60	90	90		THE VIBRATOR SEPARATOR WAS THE ONLY MACHINE THAT PERFORMED THE SEPARATION. THE FINAL SAMPLE WAS ABOUT 90% HULLED PEAS. ALTHOUGH NOT TRIED, THE COLOR SORTER MIGHT BE VERY EFFECTIVE IN MAKING THIS SEPARATION.
				UNHULLED		UNHULLED		DRAPER		POOR					
				UNHULLED		UNHULLED		SCREENS		POOR					
				UNHULLED		UNHULLED		FRICTION		POOR					
				UNHULLED		UNHULLED		PNEUMATIC		POOR					
945	PLANTAGO		PLANTAIN				REMOVE HUSK FROM SEED.	SCARIFIER	PNEUMATIC					THE BELT THRESHER AND FILAMENT THRESHER DID NOT WORK ON THIS SAMPLE.	THE
								SCARIFIER	MECHANICAL						

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
39	POA	ARACHNIFERA	TEXAS BLUEGRASS	TUFTS		TUFTS	EACH SEED FLORET HAS COTTONY TUFT OF FIBER WHICH CATCHES OTHERS LEADING TO VERY DIFFICULT HANDLING. PHYSICAL CHARACTERISTICS OF SEED MUST BE CHANGED SO THAT SEED CAN BE PLANTED READILY.	OTHER	BINDING AGENTS-PELLETIZE SEED	POOR					MANY METHODS WERE TRIED IN ATTEMPTING TO SOLVE THIS PR
146	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE IMMATURE, GROATED QUACKGRASS (96.5 SEEDS/LB)	SCREEN	4X30	FAIR	90	89	98		THE PNEUMATIC AND ELECTROSTATIC SEPARATORS PERFORMED THE BEST, BOTH YIELDING A PURE SAMPLE. SCREENING AND THE VIBRATOR GAVE ENCOURAGING RESULTS.
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY	FINE SANDPAPER DECK	FAIR	90	89	98		
				AGROPYRON	REPENS	QUACKGRASS		ELECTROSTATIC	14KV, HOR=0,VERT=11,ROT=-2-1/2	GOOD	90	100	100		
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		GOOD	90	100	100		
192	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS GROATS	SCREEN	.032" ROUND-HOLE	POOR					SCREENING WAS UNSATISFACTORY DUE TO GREAT SHRINKAGE OF THE LOT. A SEPARATION WAS ATTEMPTED ON A .084"DIAX.03"DEEP INDENT CYLINDER, BUT THE GROATS WERE LOST IN THE MACHINE SO NO RESULTS ARE AVAILABLE.
194	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGRASS GROATS	SCREEN	.028" ROUND-HOLE	POOR	92	100	100		NO TRIALS WERE SUCCESSFUL. SEED MEASUREMENTS INDICATED THAT A .0285"DIAM ROUND-HOLE SCREEN SHOULD DROP 58% OF THE BLUEGRASS FREE OF QUACKGRASS. A .028" SCREEN WAS MADE UP, BUT IT DROPPED ONLY ABOUT 1/8TH OF THE BLUEGRASS.
				AGROPYRON	REPENS	QUACKGRASS		SCREEN	.032" ROUND-HOLE	POOR					
				AGROPYRON	REPENS	QUACKGRASS		MAGNETIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		ELECTROSTATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY		POOR					
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		POOR					
238	POA	PRATENSIS	KENTUCKY BLUEGRASS	AGROPYRON	REPENS	QUACKGRASS	REMOVE QUACKGWASS GWOATS.	ELECTROSTATIC	20KV,HOR=9,VER=10,ROT=-1,90DEG	POOR		100	100		NO SATISFACTORY WAY OF REMOVING QUACKGRASS GROATS FROM BLUEGRASS WAS FOUND.
				AGROPYRON	REPENS	QUACKGRASS		SCREENS	VARIOUS SIZES	POOR					
				AGROPYRON	REPENS	QUACKGRASS		PNEUMATIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		VELVET ROLL		POOR					
				AGROPYRON	REPENS	QUACKGRASS		MAGNETIC		POOR					
				AGROPYRON	REPENS	QUACKGRASS		VIBRATORY		POOR					
466	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	AMARANTHUS		PIGWEED	REMOVE PIGWEED AND BUCKHORN PLANTAIN	INDENT CYLINDER	SEQ.#4 CYLINDER	GOOD		100	100	THE VIBRATOR WAS UNSUCCESSFUL WITH THIS PROBLEM.	A #4 INDENT CYLINDER REMOVE ALL PIGWEED AND SOME PLANTAIN. THEN THE 6X28 SLOTTED SCREEN REMOVE ABOUT 90% OF THE PLANTAIN. THERE WAS VERY LITTLE CROP LOSS.
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		SCREEN	SEQ.6X28, UNLIFTED FRACT FROM INDENT	GOOD		90			
178	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	ANTHEMIS	COTULA	DOGFENNEL	REMOVE DOGFENNEL	INDENT CYLINDER	.03"DEEPX.075"DIAM POCKETS	GOOD	80	96	99		THE INDENT CYLINDER WITH .03" DEEP X .075"DIAM POCKETS DID THE BEST YIELDING 94% OF THE CROP WITH A PURITY OF 98.9%.
				ANTHEMIS	COTULA	DOGFENNEL		INDENT CYLINDER	.03"DEEPX.084"DIAM POCKETS	GOOD	80	95	99		
444	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	ANTIRRHINUM		SNAPDRAGON	REMOVE SNAPDRAGON								ACCORDING TO SEED MEASUREMENTS, A .05" INDENT CHOULD LIFT THE SNAPDRAGON. OTHER DIMENSION SEPARATIONS ARE NOT LIKELY.
184	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	CIRSIUM	ARVENSE	CANADA THISTLE	REMOVE CANADA THISTLE	PNEUMATIC		POOR					NO METHODS TRIED WERE SUCCESSFUL. BASED ON SEED MEASUREMENTS, A ROUND-HOLE SCREEN WITH .0275" HOLES SHOULD REDUCE THISTLE CONTENT SHARPLY.
				CIRSIUM	ARVENSE	CANADA THISTLE		DRAPER		POOR					
								ELECTROSTATIC		POOR					
418	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	CIRSIUM	ARVENSE	CANADA THISTLE	REMOVE CANADA THISTLE.	SCREENS	SEQ..033" RH OVER 6X30 SLOT	GOOD					BEST RESULTS OBTAINED USING A .033" ROUND-HOLE SCREEN TO SCALP OFF WIDE THISTLE (A .035" MIGHT DO BETTER), A 6X30 SLOTTED SCREEN TO DROP THIN THISTLE AND LEAFY TRASH, AND A #5 INDENT CYLINDER TO LIFT BLUEGRASS FROM REMAINING THISTLE.
				CIRSIUM	ARVENSE	CANADA THISTLE		INDENT CYLINDER	SEQ.#5 CYLINDER	GOOD					
				CIRSIUM	ARVENSE	CANADA THISTLE		VIBRATORY		POOR					
				CIRSIUM	ARVENSE	CANADA THISTLE		PNEUMATIC		POOR					
562	POA	PRATENSIS	KENTUCKY BLUEGRASS	ERGOT		ERGOT	REMOVE ERGOT.	MAGNETIC						CONVENTIONAL METHODS FOR ACCOMPLISHING THIS SEPARATION HAVE FAILED SO SOME UNCONVENTIONAL ONES WERE TRIED. ERGOT AND BLUEGRASS WERE HEA	CONVENTIONAL METHODS WERE USED
737	POA	PRATENSIS	ADELPHI KENTUCKY BLUEGRASS	ERGOT		ERGOTIZED SEED	REMOVE ERGOTIZED BLUEGRASS SEED	GRAVITY	SEQ. BACKSLOPE=.2, ENDSLOPE=9.5, AIR=2.5, SPEED=730, DECK=PERF. CU. W/DAMS	FAIR	94	90	100	INDENT CYLINDER WAS USED ON SAMPLE FROM THE TWO PASSES ON GRAVITY TABLE AND SAMPLE FROM PNEUMATIC SEP.	CONVENTIONAL EQUIPMENT WAS INEFFECTIVE IN REDUCING ERGOT LEVELS TO REQUIRED 0.1% WHILE KEEPING CROP LOSS BELOW 20%.

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				ERGOT		ERGOTIZED SEED		GRAVITY	SEQ. BACKSLOPE=.2, ENDSLOPE=9.5, AIR=2.5, SPEED=730, DECK=PERF. CU. W/DAMS	FAIR	100	40	100		
				ERGOT		ERGOTIZED SEED		PNEUMATIC	CONTINUOUS FEED, 6X6" COLUMN	FAIR	94	90	100		
				ERGOT		ERGOTIZED SEED		INDENT CYLINDER	SEQ. 1/25X28 INDENT CYLINDER	GOOD			100		
29	POA	PRATENSIS	MERION BLUEGRASS	FUZZ		FUZZ	REMOVE STEMS, TRASH AND FUZZ FROM SEED COAT.	DEBEARDER	SEQ.85RPM, 2 HRS	GOOD					THE TREATMENT WAS DIRECTED TOWARD OBTAINING A FREE-FLOWING SEED MASS THAT COULD BE EASILY BE HANDLED BY VOLUMETRIC METERING DEVICES. 84% OF THE ORIGINAL SAMPLE WAS RECOVERED MEETING THIS REQUIREMENT. NO ATTEMPT WAS MADE TO REMOVE FOREIGN SEED.
				STEMS		STEMS		PNEUMATIC	SEQ.	GOOD					
				STEMS/TRASH		STEMS/TRASH		AIR-SCREEN	SEQ.1/14 OVER 6X32	GOOD					
117	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	HOLCUS	LANATUS	VELVETGRASS	REMOVE VELVETGRASS	VIBRATORY	FINE SANDPAPER DECK	GOOD	91				THE VIBRATOR IS THE BEST METHOD, RECLAIMING 82% OF THE ORIGINAL SAMPLE NEARLY PURE. A 30X30 SCREEN ON THE AIR-SCREEN MACHINE RECLAIMED 81% OF THE SAMPLE WITH 32,500 VELVETGRASS/LB AND A 28X28 SCREEN RECLAIMED 66% WITH 13,200 VELVETGRASS/LB.
				HOLCUS	LANATUS	VELVETGRASS		AIR-SCREEN	30X30 W/DAMS	FAIR	91				
				HOLCUS	LANATUS	VELVETGRASS		AIR-SCREEN	28X28 W/DAMS	FAIR	91				
				HOLCUS	LANATUS	VELVETGRASS		DRAPER		POOR					
				HOLCUS	LANATUS	VELVETGRASS		GRAVITY	COPPER AND CLOTH DECKS	POOR					
				HOLCUS	LANATUS	VELVETGRASS		PNEUMATIC		POOR					
				HOLCUS	LANATUS	VELVETGRASS		INDENT CYLINDER		POOR					
				HOLCUS	LANATUS	VELVETGRASS		INDENT DISC		POOR					
				HOLCUS	LANATUS	VELVETGRASS		ELECTROSTATIC		POOR					
				HOLCUS	LANATUS	VELVETGRASS		OTHER		POOR					
248	POA	PRATENSIS	KENTUCKY BLUEGRASS	INERT		INERT	REMOVE PERENNIAL SOW THISTLE.	PNEUMATIC	SEQ	GOOD					BEST RESULTS BY USING THE PNEUMATIC SEPARATOR TO REMOVE MOST OF THE IMMATURE SEED AND INERT MATTER, THEN RUNNING THE UNLIFTED PORTION OVER THE VIBRATOR.
				SONCHUS	ARVENSIS	PERENNIAL SOWTHISTLE		VIBRATORY	SEQ.8/0 280 GRIT DECK	GOOD		100	100		
				SONCHUS	ARVENSIS	PERENNIAL SOWTHISTLE		SCREENS	VARIOUS	POOR					
				SONCHUS	ARVENSIS	PERENNIAL SOWTHISTLE		ELECTROSTATIC		POOR					
1155	POA	PRATENSIS	KENTUCKY BLUEGRASS	INERT		SOIL	REMOVE SOIL	GRAVITY	KAMAS W/CANVAS BLOCK OFF DECK	GOOD	85	95	100	THIS WAS AN 8 LB LOT OF BREEDER SEED WITH 10% SOIL. A GRAVITY TABLE REMOVED A MAJORITY OF THE SOIL WITH VERY LITTLE LOSS.	USE GRAVITY TABLE TO REMOVE SOIL
				INERT		SOIL		VIBRATORY	SANDBLASTED ALUMINUM DECK	FAIR					
141	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	LIGHT SEED		LIGHT SEED	DETERMINE IF AIR SEPARATION CAN SALVAGE A SALABLE PRODUCT FROM THIS LOT WHICH IS A CUT NEAR THE LOW EDGE OF A GRAVITY TABLE. THIS TEST W	PNEUMATIC	ESM	GOOD				ADJUSTMENTS ON THE FRACTIONATING ASPIRATOR WERE DIFFICULT TO MAKE AND THE ROLL FEEDER PROVIDED POOR FEED CONTROL.	BEST RESULTS WITH THE ESM WHICH SALVAGED ABOUT 41% OF THE LOT AT 7.65LB/BU (ORIGINAL DENSITY WAS 6.86LB/BU). A HIGHER AIR SETTING WOULD PROBABLY INCREASE THE DENSITY, BUT WITH GREATER CROP LOSS.
				LIGHT SEED		LIGHT SEED		PNEUMATIC	FRACTIONATING ASPIRATOR	POOR					
48	POA	PRATENSIS	MERION BLUEGRASS	LOLIUM		RYEGRASS	REMOVE SORREL, PIGWEED AND RYEGRASS.	VIBRATORY	FINE TEXTURED DECK	FAIR					CERTIFIED BLUE-TAG REQUIREMENTS FOR THIS SAMPLE WERE APPROACHED, BUT COULD NOT BE MET. THE MAIN PROBLEM WAS LIMITING SORREL TO 27 PER POUND. 45 PER POUND WAS ACHIEVED ON THE INDENT CYLINDER IN A 17 MINUTE RUN.
								INDENT CYLINDER	#4 CYLINDER, 7RPM	FAIR					
								PNEUMATIC		FAIR					
								DRAPER		POOR					
								SCREENS		POOR					
				AMARANTHUS		PIGWEED		ELECTROSTATIC		POOR					
				RUMEX		SORREL		INDENT DISC		POOR					
346	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS	SCREEN	SEQ..038" ROUND-HOLE	GOOD					THE .038"SCREEN SCALPED OFF MUCH OF THE LARGER RYEGRASS AND THE R 3-1/2 DISC DID A GOOD JOB OF LIFTING BLUEGRASS WITH ONLY A TRACE OF SHORT RYEGRASS.
				LOLIUM		RYEGRASS		INDENT DISC	SEQ. R3-1/2 DISC	GOOD					
110	POA	PRATENSIS	KENTUCKY BLUEGRASS	MISC.		MISC.	REMOVE WEED SEEDS AND INERT MATERIAL INCLUDING CHAFF, STEMS, ROCKS, ETC.	PNEUMATIC	SEQ.	GOOD	60			SAMPLES FROM THE PNEUMATIC SEPARATOR WERE SENT THROUGH THE VIBRATOR AND THE ELECTROSTATIC SEPARATOR WITH LITTLE IMPROVEMENT.	BEST RESULTS WITH BLOWING FOLLOWED BY SCREENING ALTHOUTH THE FINAL SAMPLE STILL CONTAINED A WIDE SIZE RANGE OF ROCKS AND STEMS.
				MISC.		MISC.		SCREEN	SEQ. 1/25 OR 28X28	GOOD					
1092	POA	PRATENSIS	RUGBY KENTUCKY BLUEGRASS	PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN	REMOVE BUCKHORN PLANTAIN (135/LB).	SCREEN	6X30 WOVEN-WIRE	FAIR	100	29			THE 2.0MM INDENT CYLINDER PERFORMED THE BEST, REMOVING 89% OF THE BUCKHORN WITH A CROP LOSS OF 7%.

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				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		INDENT CYLINDER	2.0 MM CYLINDER, 24RPM	GOOD	100	82			
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		PNEUMATIC		FAIR	100	43			
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		GRAVITY	CLOTH DECK	FAIR	100	61			
145	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	PNEUMATIC	ESM	FAIR	66	100	100		BECAUSE OF THE WEIGHT DIFFERENCE BETWEED THE SEEDS, THE PNEUMATIC SEPARATOR SHOWED SOME PROMISE, BUT THE RESULTS WERE NOT REPEATABLE WITH A LARGER LOT. A CATAPULT DEVICE SHOWED SOME SEPARATING POTENTIAL.
				POA	ANNUA	ANNUAL BLUEGRASS		OTHER	CATAPULT DEVICE	FAIR					
				POA	ANNUA	ANNUAL BLUEGRASS		ELECTROSTATIC		POOR					
				POA	ANNUA	ANNUAL BLUEGRASS		VIBRATORY		POOR					
209	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	POA	BULBOSA	BULBOUS BLUEGRASS	REMOVE BULBOUS BLUEGRASS	PNEUMATIC		POOR					ALL TRIALS WERE UNSATISFACTORY. THE BEST APPROACH SEEMED TO BE SCREENING WITH A 26X26 WIRE MESH SCREEN WHICH HELD MANY CONTAMINANTS IN A REJECT FRACTION, BUT THE DROPPED FRACTION (85% YIELD) STILL HAD EXCESSIVE AMOUNTS OF BULBOUS BLUEGRASS.
				POA	BULBOSA	BULBOUS BLUEGRASS		SCREENS	VARIOUS	POOR					
				POA	BULBOSA	BULBOUS BLUEGRASS		INDENT CYLINDER		POOR					
				POA	BULBOSA	BULBOUS BLUEGRASS		VIBRATORY		POOR					
				POA	BULBOSA	BULBOUS BLUEGRASS		ELECTROSTATIC		POOR					
				POA	BULBOSA	BULBOUS BLUEGRASS		VELVET ROLL		POOR					
				POA	BULBOSA	BULBOUS BLUEGRASS		DRAPER		POOR					
284	POA	PRATENSIS	WINDSOR KENTUCKY BLUEGRASS	POA	PRATENSIS	BLUEGRASS DOUBLES	DETERMINE SCREEN SIZE THAT WILL SCALP OFF BLUEGRASS DOUBLES. CLEAN PRODUCT SHOULD CONTAIN LESS THAN 2% DOUBLES.	AIR-SCREEN	26X26 W/DAMS	GOOD					THE 26X26 SCREEN WITH DAMS IS RECOMMENDED. IN TRIALS, 90% OR MORE OF THE SINGLES WERE RECOVERED WITH AN ACCEPTABLY LOW DOUBLES COUNT.
327	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	POA	PRATENSIS	KENTUCKY BLUEGRASS	REMOVE KENTUCKY BLUEGRASS FROM FOUNDATION MERION BLUEGRASS.								BASED ON SEED MEASUREMENTS, A 6/64X24GA INDENT CYLINDER WAS RECOMMENDED FOR THIS SEPARATION.
331	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	CAN ANNUAL BLUEGRASS BE REMOVED BY LENGTH SEPARATION USING AN INDENT CYLINDER.								BASED ON MEASUREMENTS, THERE IS NO HOPE FOR LENGTH, WIDTH OR THICKNESS SEPARATION OF ANNUAL BLUEGRASS FROM MERION KENTUCKY BLUEGRASS.
397	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	POA	COMPRESSA	CANADA BLUEGRASS	REMOVE CANADA BLUEGRASS	SCREEN	SEQ.4X30 SLOT	GOOD					THE RECOMMENDED PROCEDURE IS TO DROP HALF THE CANADA BLUEGRASS WITH THE 4X30 SLOT AND REMOVE THE LOW-DENSITY CANADA WITH THE GRAVITY TABLE.
				POA	COMPRESSA	CANADA BLUEGRASS		GRAVITY	SEQ.	GOOD					
406	POA	PRATENSIS	KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS FROM THIS ALREADY-SCREENED LOT.	INDENT CYLINDER	#6 CYLINDER	POOR					THE BEST APPROACH WAS LENGTH SEPARATION WITH A #6 INDENT CYLINDER WHICH REDUCED ANNUAL BLUEGRASS TO 18/LB WITH 40% LOSS.
				POA	ANNUA	ANNUAL BLUEGRASS		ELECTROSTATIC		POOR					
				POA	ANNUA	ANNUAL BLUEGRASS		VIBRATORY		POOR					
484	POA	PRATENSIS	KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	SCREENS		POOR					THE CROP AND CONTAMINANT ARE TOO SIMILAR TO PERMIT SEPARATION.
				POA	ANNUA	ANNUAL BLUEGRASS		PNEUMATIC		POOR					
491	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS ON VIBRATOR.	VIBRATORY	180 GRIT SANDPAPER DECK	GOOD	75				FRACTIONS WERE GIVEN TO SUBMITTER FOR EVALUATION.
530	POA	PRATENSIS	KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	SCREENS	ROUND-HOLE AND SLOTS	POOR					ATTEMPTS AT SEPARATION WERE UNSUCCESSFUL. AN INDENT CYLINDER, MAYBE A #6 1/2, MIGHT LIFT MOST OF THE CONTAMINANT, BUT WOULD ALSO LIFT 25-30% OF THE CROP.
				POA	ANNUA	ANNUAL BLUEGRASS		PNEUMATIC		POOR					
752	POA	PRATENSIS	KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS							SEPARATION WAS ATTEMPED BY INDENT CYLINDER, SCREENS, PNEUMATIC COLUMN, GRAVITY TABLE, VIBRATOR, AND ELECTROSTATIC SEPARATOR.	NONE OF THE MACHINES USED RESULTED IN SEPARATIONS THAT COULD BE APPLIED TO COMMERCIAL SEED CLEANING PROCESSES FOR THIS MIXTURE.
1102	POA	PRATENSIS	KENTUCKY BLUEGRASS	POA	PRATENSIS	UNDELINTED KENTUCKY BLUEGRASS	DELINT	SCARIFIER	LAH W/#26 ROUND WIRE MANTLE	GOOD				THIS WAS A BREEDER LOT THAT NEEDED DELINTING BEFORE CLEANING AND PLANTING	LAH HULLER SCARIFIER DID A GOOD JOB OF DELINTING BLUEGRASS SEED. LOT TOOK ABOUT 4 HOURS TO CONDITION.
1120	POA	PRATENSIS	KENTUCKY BLUEGRASS	POA	PRATENSIS	LOW GERM SEED	IMPROVE GERMINATION OF STOCK SEED	GRAVITY	KAMAS WITH SMALL CLOTH DECK	GOOD				A GRAVITY TABLE WAS USED TO SEPARATE LOW DENSITY SEED. THREE FRACTIONS WERE CREATED WITH WEIGHTS GIVEN BELOW. THE LIGHT FRACTION COMPRISING 18% OF THE ORIGINAL WEIGHT HAD	GRAVITY TABLE SUCCESSFULLY UPGRADES GERMINATION OF KENTUCKY BLUEGRASS
1145	POA	PRATENSIS	KENTUCKY BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS FROM KENTUCKY BLUEGRASS	INDENT CYLINDER	2.35 MM POCKET					THIS WAS A SMALL LOT FOR A GROWOUT TEST.	
210	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS	RUMEX	ACETOSELLA	SHEEPSORREL	REMOVE SHEEP SORREL	SCREEN	4X24 WIRE MESH	FAIR		47			THE 4X24 SCREEN SHOWED THE BEST RESULTS, BUT STILL ONLY REMOVED 47% OF THE SHEEPSORREL. THE INDENT CYLINDERS PICKED UP SORREL EFFECTIVELY, BUT ALSO TOO MUCH BLUEGRASS. A WIPER BRUSH WOULD HAVE REDUCED CROP LOSS.
				RUMEX	ACETOSELLA	SHEEPSORREL		INDENT CYLINDER	.052X.025 & .059X.019 TRIED	POOR					

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
243	POA	PRATENSIS	DELTA KENTUCKY BLUEGRASS	RUMEX	CRISPUS	CURLY DOCK	REMOVE CURLY DOCK (IMMATURE, YELLOW, SIDES COLLAPSED).	VIBRATORY	80 GRIT DECK	GOOD	50	100	100	DOCK CONTENT IN ORIGINAL SAMPLE WAS 90/LB. SINCE THIS WAS SO LITTLE, AN ARTIFICIAL MIXTURE OF 58 SEEDS EACH OF DOCK AND BLUEGRASS WAS MADE UP AND USED IN ALL THE TRIALS.	BEST PRACTICAL RECOMMENDATION IS 1/25 ROUND-HOLE SCREEN WITH DAMS. BASED ON THE TRIALS, THIS SHOULD REDUCE DOCK CONTENT FROM 90/LB TO 8/LB, WELL WITHIN CERTIFICATION LIMITS.
				RUMEX	CRISPUS	CURLY DOCK		SCREEN	1/25 ROUND-HOLE	GOOD	50	91	92		
				RUMEX	CRISPUS	CURLY DOCK		SCREEN	SEQ.1/25 ROUND-HOLE	GOOD	50				
				RUMEX	CRISPUS	CURLY DOCK		INDENT CYLINDER	SEQ..075DIAX.03DEEP POCKET	GOOD		100	100		
				RUMEX	CRISPUS	CURLY DOCK		SCREEN	.038"ROUND-HOLE	FAIR	50	91	92		
1179	POA	PRATENSIS	BANFF KENTUCKY BLUE GRASS	VERONICA	SP	SPEEDWELL	REMOVE SPEEDWELL TO LESS THAN .5%	SCREENS	6X34	POOR	97	10	97	THE OSU SEED TESTING LAB RETURNED RESULTS OF THE INDENT CYLINDER TEST AND SHOWED 0.52% TOTAL WEEDS WITH SPEEDWELL BEING 4113/LB AND ANNUAL BLUEGRASS BEING 136/LB.	THE INDENT CYLINDER IS A GOOD SOLUTION THAT SHOULD MEET THE CONTRACTUAL PURITY REQUIREMENTS.
				VERONICA	SP	SPEEDWELL		INDENT CYLINDER	1.75MM	GOOD	97	50	98		
203	POA	PRATENSIS	MERION KENTUCKY BLUEGRASS				REMOVE CANADA THISTLE AND OTHER CONTAMINANTS.								PRELIMINARY WORK WITH SCREENS, INDENT DISK AND INDENT CYLINDER PROVED INCONCLUSIVE. LOT WAS SUBSEQUENTLY CLEANED UP AND SOLD.
408	POA	PRATENSIS	FULKING KENTUCKY BLUEGRASS				MEASURE SEEDS.								MEASUREMENTS ONLY.
1236	POA	PRATENSIS	KENTUCKY BLUEGRASS												
1257	POA	SCABRELLA													
1245	POA	TRIVALIS	ROUGHSTALK BLUEGRASS	INERT		INERT	DELINT AND CLEAN	SCARIFIER	LAH W/14X14WW MANTLE	GOOD	70%		99	THIS WAS TWO BREEDER LOTS OF P. TRIVALIS. THE RATTAIL FESCUE WAS FOUND AFTER DELINTING AND SCREENING AND WAS MOSTLY REMOVED USING THE INDENT CYLINDER. A SLIGHTLY LARGER SIZE WOULD PROBABLY GIVE BETTER RESULTS BUT	USE A BRUSH DEPEARDER AND 16X16WW TOP AND 6X36WW BOTTOM SCREENS FOLLOWED BY INDENT CYLINDER WITH 3.0MM POCKET TO CONDITION FIELD RUN POA TRIVALIS.
				INERT		INERT		AIR-SCREEN	16X16WW TOP, 6X36WW BOTTOM AND AIR	GOOD					
				VULPIA	MYUROS	RATTAIL FESCUE		INDENT CYLINDER	3MM POCKET	FAIR					
1198	POA	TRIVALIS	ROUGH STALK BLUEGRASS	POA		UNTHRESHED ROUGH STALK BLUEGRASS	DEWOOL	SCARIFIER	LAH W/26X26 WIRE MANTLE	GOOD				THIS WORK INCLUDED SEVERAL BAGS OF BREEDER SEED TO BE CONDITIONED FOR INCREASE. THE LAH BRUSH MACHINE WAS USED WITH 26X26 WIRE MANTLE. SEED WAS RUN THROUGH THE DISCHARGE OPENING WH	
369	POA	TRIVIALIS	ROUGH BLUEGRASS	CAPSELLA	BURSA-PASTORIS	SHEPHERDSPURSE	MEASURE SEEDS OF ROUGH BLUEGRASS, CHICKWEED, SHEPHERDSPURSE AND BIG MOUSEAR AND MAKE RECOMMENDATIONS TO REMOVE THE WEEDS FROM THE BLUEGRASS.	SCREEN	.018" SLOT						A .0468"DIA X .020"DEEP INDENT
						CHICKWEED		SCREEN	.036" ROUND-HOLE						
				CAPSELLA	BURSA-PASTORIS	SHEPHERDSPURSE		INDENT CYLINDER	.0468"DIA X .020"DEEP POCKET						
						CHICKWEED		INDENT CYLINDER	.0468"DIA X .020"DEEP POCKET						
				CERASTIUM	VULGATUM	BIG MOUSEAR		INDENT CYLINDER	.0468"DIA X .020"DEEP POCKET						
1122	POA	TRIVIALIS	ROUGH STALK BLUEGRASS	INERT		STRAW, CHAFF	REMOVE SHORT STRAWS	SCREEN	SEQ 1/14RH OR 20X20 WW	GOOD				THIS IS A COMMERCIAL LOT THAT IS 12% INERT, HAS 5889 RATTAIL FESCUE/LB AND 82 ANNUAL BLUEGRASS/LB. THE VALUES GIVEN FOR LOSS ARE ACTUALLY SHRINKAGE. THE 40% FIGURE FOR THE	
				INERT		STRAW, CHAFF		INDENT CYLINDER	SEQ 3MM	GOOD					
				INERT		STRAW, CHAFF		PNEUMATIC		GOOD					
				VULPIA	MYUROS	RATTAIL FESCUE		INDENT CYLINDER	3 MM	GOOD					
357	POA	TRIVIALIS	ROUGH BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS	AIR-SCREEN	SEQ..038" OVER .026" RH					THE FRACTION HELD BY THE .026 SCREEN WAS SPLIT IN HALF. ONE HALF WAS RUN THROUGH A .075"DIA X .030"DEEP INDENT CYLINDER AND THE OTHER WAS RUN THROUGH A .084"DIA X .030"DEEP INDENT. ALL FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.	NO RESULTS AVAILABLE.
				POA	ANNUA	ANNUAL BLUEGRASS		INDENT CYLINDER	SEQ.SEE NOTES						

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359	POA	TRIVIALIS	ROUGH BLUEGRASS			CHICKWEED	REMOVE CHICKWEED AND INERT MATERIAL.	INDENT CYLINDER	.056"DIA X .019"DEEP POCKET	GOOD			100		THE .056"DIA X .019"DEEP INDENT CYLINDER RECOVERED 96% OF THE BLUEGRASS AT A PURITY OF 99.8%.
				INERT		INERT		INDENT CYLINDER	.056"DIA X .019"DEEP POCKET	GOOD			100		
244	POA		NEWPORT BLUEGRASS	AIRA		HAIRGRASS	REMOVE HAIRGRASS.	SCREEN	6X32	GOOD					A NUMBER OF SCREENS WERE TRIED AND THE 6X32 PRODUCED EXCELLENT RESULTS WITH 5% CROP SHRINKAGE.
173	POA		NEWPORT BLUEGRASS	ALLIUM	VINEALE	WILD GARLIC	REMOVE ALL WILD GARLIC.	ELECTROSTATIC	18KV,HOR=1.5,VER=11.75,ROT=-.2	GOOD		100	100		THE ELECTROSTATIC DID THE BEST, DROPPING 5% OF THE SAMPLE CONTAINING ALL THE WILD GARLIC. THE 1/24 SCREEN ALSO DID WELL, REMOVING 80% OF THE GARLIC ALONG WITH 2% OF THE BLUEGRASS.
				ALLIUM	VINEALE	WILD GARLIC		SCREEN	1/24 ROUND HOLE	GOOD		80			
				ALLIUM	VINEALE	WILD GARLIC		PNEUMATIC		POOR					
				ALLIUM	VINEALE	WILD GARLIC		VELVET ROLL		POOR					
								DRAPER		POOR					
626	POA		RYEGRASS, VICTA	ALLIUM	VINEALE	WILD GARLIC	REMOVE WATER FOXTAIL	SCREEN	6X30	GOOD		100	100		GOOD RESULTS WERE OBTAINED WITH A 6X30 SLOTTED SCREEN, PNEUMATIC SEPARATOR, AND VIBRATOR SEPARATOR.
								PNEUMATIC		GOOD		88			
								VIBRATORY	SANDPAPER DECK	GOOD		100	100		
								FRICTION		POOR					
475	POA		BLUEGRASS		ALBUM	LAMBSQUARTER	REMOVE LAMBSQUARTER, WILD MUSTARD, COMMON CHICKWEED AND OTHERS.	SCREEN	SEQ.1/20 ROUND-HOLE	GOOD					THE PNEUMATIC SEPARATOR WAS TRIED, BUT BEST RESULTS WERE HAD WITH A SEQUENCE OF SEQUENCE OF SCREENING AND INDENT CYLINDER SEPARATION.
				BRASSICA	RAPA	WILD MUSTARD		SCREEN	SEQ.4X26 SLOTTED	GOOD					
				STELLARIA	MEDIA	COMMON CHICKWEED		INDENT CYLINDER	SEQ.#4 CYLINDER	GOOD					
411	POA		S-2 BLUEGRASS	DIGITARIA		CRABGRASS	REMOVE CRABGRASS.	SCREEN	.033" ROUND-HOLE	GOOD					THE .033" ROUND-HOLE SCREEN IS RECOMMENDED. IT HELD ALL CRABGRASS AND A FEW BLUEGRASS DOUBLES AND DROPPED THE REST OF THE BLUEGRASS.
17	POA		BLUEGRASS	ERGOT		ERGOT	REMOVE ERGOT	PNEUMATIC	2 PASSES	FAIR	89	30	92		BEST RESULTS WERE OBTAINED WITH 2 PASSES ON THE PNEUMATIC SEPARATOR, WHICH STILL LEFT THE LOT WITH 7.7% ERGOT AT 30.9% CROP LOSS. A COMBINATION OF SCREENING AND BLOWING MIGHT YIELD BETTER RESULTS.
				ERGOT		ERGOT		ELECTROSTATIC		POOR					
				ERGOT		ERGOT		GRAVITY		POOR					
477	POA		BLUEGRASS	ERGOT		ERGOT	REMOVE ERGOT	SCREEN	SEQ..038" ROUND-HOLE						ALL METHODS WERE UNSUCCESSFUL. SCREENING AND BLOWING LOST 15% OF CROP AND FINAL PRODUCT WAS STILL FAR FROM ACCEPTABLE. "LOOKS HOPELESS".
				ERGOT		ERGOT		PNEUMATIC	SEQ.	POOR					
570	POA		BLUEGRASS	FESTUCA	ARUNDINACEA	TALL FESCUE	REMOVE TALL FESCUE GROATS AND VELVETGRASS.	GRAVITY		FAIR					THE GRAVITY TABLE HELPED, BUT DID NOT MEET THE REQUIREMENTS OF THE SUBMITTER.
				HOLCUS	LANATUS	VELVETGRASS									
682	POA		BLUEGRASS (PARADE)	INERT		INERT	REMOVE INERT MATERIAL	AIR-SCREEN	SEQ. 1/21 RD-HOLE SCREEN						A SEQUENCE OF AIR SEPARATOR/GRAVITY TABLE/PNEUMATIC SEPARATOR YIELDED A SAMPLE THAT LOOKED QUITE CLEAN AND SAVE 86.8% OF THE AVAILABLE SEED.
				INERT		INERT		GRAVITY	SEQ.						
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
931	POA		BLUEGRASS	INERT		INERT	THRESH AND SEPARATE FOR GERMINATION TESTS TO DETERMINE HERBICIDE EFFECTIVENESS.	SCREENS	SEQ.1/8 RD OVER 1/16 RD OVER 6X22 SLOT						SCREENS AND BLOWER CLEANED THE SEED FOR GERMINATION TESTS.
				INERT		INERT		PNEUMATIC	SEQ.						
358	POA		WINDSOR BLUEGRASS	LOLIUM		RYEGRASS	REMOVE RYEGRASS AND RATTAIL FESCUE.	INDENT DISC	R3-3/4 DISC						THE R3-3/4 INDENT DISC SALVAGED 88% OF THE LOT WITH A PURITY OF 99.94%. THESE RESULTS WERE ACCEPTABLE.
				VULPIA	MYUROS	RATTAIL FESCUE		INDENT DISC	R3-3/4 DISC						
697	POA		PARADE BLUEGRASS	MISC.		MISC.	REMOVE BENTGRASS, SWEET VERNAL GRASS, FOXTAIL AND INERT MATERIAL.	PNEUMATIC	SEQ.						BEST RESULTS WERE OBTAINED WITH THE ABOVE SEQUENCE. SIMILAR RESULTS WERE OBTAINED WITH A PNEUMATIC/VELVET ROLL/AIR-SCREEN SEQUENCE, BUT A GREAT DEAL OF CLOGGING OCCURED USING THE CLIPPER.
				MISC.		MISC.		VELVET ROLL	SEQ. 12.5 DEG ANGLE, 50 RPM						
				MISC.		MISC.		SCREEN	SEQ. 1/24 ROUND HOLE	GOOD	56		93		
679	POA		BARON BLUEGRASS	PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN	REMOVE BUCKHORN PLANTAINJ	INDENT CYLINDER	#5 CYLINDER	FAIR				THE MAGNETIC AND PNEUMATIC SEPARATORS DID NOT MAKE A SATISFACTORY SEPARATION.	ONLY THE #5 INDENT CYLINDER SHOWED PROMISE, REMOVING MANY OF THE PLANTAIN WITH A 10% CROP LOSS.
509	POA		NUGGET BLUEGRASS	POA	ANNUA	ANNUAL BLUEGRASS	REMOVE ANNUAL BLUEGRASS								C
499	POA		BLUEGRASS				THRESH AND CLEAN SEED.	BELT THRESHER	SEQ.5:1 SPEED, .011" CLEAR.	GOOD					BLUEGRASS CAN BE THRESHED AND CLEANED USING THE ABOVE SEQUENCE. FURTHER REMOVAL OF WEED SEEDS AND ERGOT CAN BE OBTAINED WITH INDENT DISCS OR CYLINDERS.
				CHAFF				PNEUMATIC	SEQ.100FPM	GOOD					
				STEMS				SCREENS	SEQ.1/12 AND 1/15 ROUND-HOLE	GOOD					
				WEEDS				SCREEN	SEQ.6X19 WIRE	GOOD					
				TRASH				SCREEN	SEQ.26X26 WIRE	GOOD					

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821	PRIMULA		PRIMROSE	ANTHEMUS	COTULA	DOGFENNEL	REMOVE DOGFENNEL AND INERT MATERIAL.	SCREEN	SEQ.1/18 ROUND-HOLE						ONLY THE VIBRATOR SEPARATOR AND SCREENS GAVE SATISFACTORY RESULTS, AND BECAUSE OF THE QUANTITY OF MATERIAL, THE ABOVE SEQUENCE INVOLVING SCREENS WAS CONSIDERED THE ONLY PRACTICAL SOLUTION.
								PNEUMATIC	SEQ.						
								OTHER	SEQ.PREC GRADER, .038" CYL.						
								PNEUMATIC	SEQ.	FAIR			98		
				INERT		INERT		VIBRATORY		FAIR					
158	PROSOPIS	JULIFLORA	VINE MESQUITE	ECHINOCHLOA	CRUSGALLI	BARNYARDGRASS	REMOVE BARNYARD GRASS, POLYGONUM AND JOHNSON GRASS.	ELECTROSTATIC	20KV, ROT=-2-1/2,HOR=2,VERT=11	FAIR	25	90	50	THE ELECTROSTATIC SAMPLE WAS AN ARTIFICIAL MIXTURE MADE UP OF 10 SEEDS EACH OF BARNYARDGRASS, JOHNSONGRASS, POLYGONUM, AND MESQUITE. UNSATISFACTORY RESULTS WERE HAD WITH THE MAGNETIC SEPARATOR, INDENT CYLINDER AND DISC, PNEUMATIC SEPARATOR, VELVET ROLLS.	NO ENTIRELY SATISFACTORY WAY WAS FOUND TO PERFORM THIS SEPARATION. THE ELECTROSTATIC SEPARATOR DID THE BEST, CONCENTRATING BARNYARDGRASS AND JOHNSONGRASS IN A FRACTION CONTAINING ABOUT 20% OF THE CROP.
				SORGHUM	HALEPENSE	JOHNSONGRASS		ELECTROSTATIC	20KV, ROT=-2-1/2,HOR=2,VERT=11	GOOD	25	100	50		
				POLYGONUM		POLYGONUM		ELECTROSTATIC	20KV, ROT=-2-1/2,HOR=2,VERT=11	POOR	25	30	50		
				POLYGONUM		POLYGONUM		SCREEN	#5 TRIANGULAR	GOOD					
				POLYGONUM		POLYGONUM		VIBRATORY		FAIR		99			
1131	PSEUDOSUGA	MENZEISII	DOUGLAS FIR	INERT		PITCH AND PLANT PARTS		VIBRATORY	SANDBLASTED DECK	GOOD	75	90	95	THIS MATERIAL WAS TYPICAL OF THE SMALL LOTS THAT THE SUBMITTERS WORKED WITH.	USE VIBRATORY SEPARATOR TO REMOVE PICTH AND CONE PIECES FROM DOUGLAS FIR SEED
				INERT		PITCH AND PLANT		ELECTROSTATIC	PINNING ELECTRODE	GOOD					
				INERT		PITCH AND PLANT PARTS		FRICTION	SMOOTH RUBBER BAR, CARPET BELT	FAIR					
1206	PSEUDOSUGA	MENZEIZII	DOUGLAS FIR	NEEDLES AND INERT			REMOVE INERT MATERIAL	SCREENS	12 RH, 6/64 *3/4, 1/8 * 3/4					REMOVE INERT MATERIAL INCLUDING UNFILLED SEED. VIBRATORY, GRAVITY, SCREENING, PNEUMATIC, MAGENTIC, FRICTION WERE TESTED. RESULTS WERE INCONCLUSIVE BUT APPROX. 3% INERT REMAINED OF 25% ORIGINAL INERT. SEED WAS BREEDER SEED FROM INDIVIDUAL PARENTS.	
				EMPTY SEED				PNEUMATIC	EMPTY UP	BEST					
1089	PSEUDOSUGA	MENZIESII	DOUGLAS FIR	INERT		CONE PARTS	REMOVE CONE PARTS OF THE SAME SIZE AS THE SEED	FRICTION	FIRM FOAM BAR	GOOD	70	99	98	THE SEPARATION CA	TO ROMOVE CONE PARTS FROM DOUGLAS FIR SEED USE A FRICTION SEPARATOR WITH FIRM FOAM BAR.
92	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	EMPTIES		EMPTY SEEDS	SEPARATE EMPTY SEED FROM FULL SEED.	ELECTROSTATIC		POOR					FAVORABLE RESULTS WERE OBTAINED ON THE GRAVITY TABLE. THE LOW EDGE CONTAINED PREDOMINANTLY EMPTY SEEDS AND THE HIGH EDGE MOSTLY FULL SEEDS. THE MIDDLE FRACTION WAS NOT INVESTIGATED.
				EMPTIES		EMPTY SEEDS		PNEUMATIC		POOR					
				EMPTIES		EMPTY SEEDS		GRAVITY	FINE METAL MESH DECK W/DAMS, 480 RPM	FAIR					
467	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	INERT		INERT	REMOVE NEEDLES, PITCH, CONE DEBRIS	GRAVITY		POOR					THE PNEUMATIC SEPARATOR LIFTED EMPTY SEED AND SOME CONTAMINANT, BUT NOT ENOUGH. THE ELECTROSTATIC SEPARATOR LIFTED ALL CONTAMINANT WITH NO CROP LOSS.
				INERT		INERT		PNEUMATIC		FAIR					
				INERT		INERT		ELECTROSTATIC	18KV, HOR=4, VER=8 1/2, ROT=2, DIV=90DEG	GOOD		100	100		
662	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	INERT		INERT	REMOVE NEEDLES, CONE PIECES, TWIGS AND PITCH	FRICTION	YELLOW CARPET, FIRM FOAM BAR	GOOD				VIBRATOR, BOUNCE PLATE AND INCLINED DRAPER WERE UNSATISFACTORY. SEE #1054 AND #1055 (BOTH FORMERLY #662) FOR SAME PROBLEM WITH WESTERN WHITE PINE AND SUGAR PINE.	THE FRICTION SEPARATOR WORKED VERY WELL. THE REJECT MATERIAL WAS RERUN FOUR TIMES, SALVAGING ADDITIONAL SEED EACH TIME.
687	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	INERT		INERT	REMOVE WING MATERIAL, PITCH AND OTHER INERT PARTICLES.	FRICTION	FOAM BAR, CARPET BELT	FAIR					BEST RESULTS WERE OBTAINED WITH A SOFT CARPET BELT AND RUBBER WEATHERSTRIPPING BAR.
				INERT		INERT		FRICTION	RUBBER WEATHERSTRIPPING BAR	GOOD					
733	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	INERT		INERT	REMOVE INERT MATERIAL: CONE MATERIAL, PITCH	FRICTION							NO QUANTITATIVE RESULTS OBTAINED, BUT FRICTION SEPARATION REMOVED INERT MATERIAL FROM DOUGLAS SEED TO WITHIN ACCEPTABLE LEVELS
583	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	NEEDLES		NEEDLES	REMOVE NEEDLES	OTHER	PRECISION GRADER, #4 SLOTTED SHELL	GOOD					TO CLEAN UP SMALL LOTS OF DOUGLAS FIR NEEDLES AND SEEDS, THE PRECISION GRADER AND AIR COLUMN DO A VERY GOOD JOB.
				NEEDLES		NEEDLES		PNEUMATIC		GOOD					

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563	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	PITCH		PITCH	REMOVE PITCH PARTICLES.	INDENT DISC	SEQ.5 1/2V OR 6V DISCS					VIBRATOR, BOUNCE PLATE, SCREENS ONLY AND BLOWER WERE UNSATISFACTORY. EFFORTS TO HEAT THE SAMPLE TO SOFTEN THE PITCH, COAT IT WITH MAGNETIC POWDER AND USE THE MAGNETIC SEPARATOR WERE ALSO UNSUCCESSFUL.	BEST RESULTS WERE OBTAINED WITH THE INDENT DISC FOLLOWED BY SCREENING OF UNLIFTED MATERIAL (PRIMARILY SEED). DEPENDING ON WHICH FRACTIONS ARE SAVED, 77% TO 81% OF THE ORIGINAL LOT CAN BE SALVAGED.
				PITCH		PITCH		SCREENS	SEQ.1/13X1/2,1/14X1/2,1/15X1/2	GOOD	77		95		
664	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR	PTICH		PITCH	REMOVE PITCH PARTICLES	FRICTION	FIBRE-TRAN BAR, GOLD CARPET	GOOD					FRICTION SEPARATOR WORKED VERY WELL. ELECTROSTATIC AND PNEUMATIC SEPARATORS WERE INEFFECTIVE.
660	PSEUDOTSUGA	MENZIESII	DOUGLAS FIR				SIZE SEEDS BY LENGTH								THE DOUGLAS FIR SEEDS WERE LENGTH GRADED BY INDENT DISK AND INDENT CYLINDER. RESULTIN FRACTIONS WILL BE EVALUATED BY SUBMITTER.
674	PSYLLIUM			INERT		INERT	REMOVE INERT MATERIAL: STEMS LEAF, MATERIAL AND HULLS.	SCREEN	SEQ.1/14 ROUND-HOLE	GOOD					THE VIBRATOR SEPARATOR ALONE WAS INEFFECTIVE, BUT IN THE ABOVE SEQUENCE, YIELDED A CLEAN PRODUCT WITH 10% LOSS.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD					
				INERT		INERT		VIBRATORY	SEQ.	GOOD					
680	PSYLLIUM			INERT		INERT	REMOVE INERT MATERIAL	SCREENS	1/14 RD HOLE,6X36 SLOTTED	GOOD					THE PNEUMATIC SEPARATOR 0R A 1/14 ROUND-HOLE SCREEN OVER A 6X36 SLOTTED WIRE SCREEN BOTH DO A GOOD JOB OF CLEANING THIS SAMPLE.
				INERT		INERT		PNEUMATIC		GOOD					
1163	PURSHIA	TRIDENTATA	BITTERBRUSH				THRESH AND CLEAN							SAMPLE RECD. 9-28-90.	
1062	PYCANTHEMUM	VIRGINICUM	MOUNTAIN MINT												
1202	RAPHANUS	SATIVUM	DIKON RADISH	RAHPANUS	SATIVUM	DISCOLORED RADISH SEED		COLOR SORTER						THIS SAMPLE CAME AS THREE LOTS OF SEED WITH SOME INERT MATERIAL AND SOME DISCOLORED SEED	
415	RAPHANUS	SATIVUS	RADISH	CONVOLVULUS	ARVENSIS	FIELD BINDWEED	REMOVE FIELD BINDWEED.	MAGNETIC	SEQ.IRON FILINGS & WATER						THE MAGNETIC SEPARATOR FOLLOWED BY VIBRATOR DID A GOOD JOB, REMOVING ALL THE BINDWEED WITH 22% LOSS.
				CONVOLVULUS	ARVENSIS	FIELD BINDWEED		VIBRATORY	SEQ.	GOOD		100	100		
507	RAPHANUS	SATIVUS	RADISH	ERGOT		ERGOT	REMOVE ERGOT.	VELVET ROLL		FAIR		50		PNEUMATIC, ELECTROSTATIC, VIBRATOR AND BOUNCE PLATE WERE INEFFECTIVE.	THE MAGNETIC SEPARATOR AND COLOR SORTER DID THE BEST JOB.
								MAGNETIC		GOOD		70			
				ERGOT		ERGOT		COLOR SORTER		GOOD		75			
818	RAPHANUS	SATIVUS	RADISH	ERGOT		ERGOT	REMOVE BEDSTRAW	MAGNETIC	IRON POWDER	GOOD	98	84	100		OF THE MACHINES TRIED, ONLY THE MAGNETIC SEPARATOR WAS EFFECTIVE ENOUGH FOR FURTHER STUDY. THE MAGNETIC SEPARATOR REMOVED 84% OF THE BEDSTRAW WITH ABOUT 8% CROP LOSS.
757	RAPHANUS	SATIVUS	RADISH	INERT		INERT	REMOVE INERT MATERIAL: MUD CLODS AND ROCKS.	VELVET ROLL		FAIR	67	92	93		THE FRICTION SEPARATOR IS A GOOD MEANS TO REMOVE DIRT CLODS FROM RADISH SEED. BAR ANGLE IS CRITICAL. ANGLES GREATER THAN 15 TO 17 DEGREES GIVE VERY POOR RESULTS.
				INERT		INERT		FRICTION	BAR ANGLE=12 DEGREES, 4 PASSES MADE	GOOD	72	99	99		
447	RAPHANUS	SATIVUS	BEET	IPOMEA		MORNINGGLORY	REMOVE MORNINGGLORY	SCREEN	SEQ.8-1/2 ROUND-HOLE	GOOD					ALL MORNINGGLORY WAS REMOVED FROM THE BEET SEED WITH LESS THAN 1% LOSS. THE SAMPLE WAS SCREENED WITH A #8-1/2 ROUND-HOLE SCREEN. THE THROUGH FRACTION WAS BLOWN AND THE OVER FRACTION WAS PASSED OVER THE VELVET ROLLS.
				IPOMEA		MORNINGGLORY		VELVET ROLL	SEQ.FRCT OVER RH SCREEN	GOOD					
				IPOMEA		MORNINGGLORY		PNEUMATIC	SEQ.FRCT THRU RH SCREEN	GOOD		100	100		
778	RAPHANUS	SATIVUS	RADISH	MISC.		MISC	REMOVE SCLEROTIA, WHEAT, BARLEY, ETC.	INDENT DISC	SEQ. V-5	GOOD				TOLERANCE LIMIT OF SCLEROTIA WAS .01%.	THE SEQUENCE OF INDENT DISK AND FRICTION SEPARATOR WORKED THE BEST WITH CROP LOSS OF 4.8% AND 96.4% SCLEROTIA REMOVAL.
				MISC		MISC		FRICTION	SEQ. SCOTCHBRITE BAR INCLINE=12	GOOD					
				MISC		MISC		VELVET ROLL		POOR					
				MISC		MISC		MAGNETIC		FAIR					
586	RAPHANUS	SATIVUS	RADISH	POLYGONUM	CONVOLVULUS	WILD BUCKWHEAT	REMOVE WILD BUCKWHEAT	PNEUMATIC		POOR					THE FRICTION SEPARATOR SHOWED GOOD PROMISE FOR THIS SEPARATION.
								VIBRATORY		POOR					
								FRICTION	FIBRE-TRAN BELT, PILE AND FIBRE-TRAN BAR	FAIR					
1115	RAPHANUS	SATIVUS	RADISH	POLYGONUM	CONVOVULUS	WILD BUCKWHEAT	REMOVE WILD BUCKWHEAT FROM RADISH	SCREEN	#8 TRIANGLE	GOOD		99	99	THIS WAS A 3000 LB LOT WITH APPROX 1% WILD BUCKWHEAT. REQUIRED PURITY WAS 100%	THE #9 TRIANGULAR SCREEN REMOVED ALL WILD BUCKWHEAT ALTHOUGH 42% OF THE CROP WAS LOST.
				POLYGONUM	CONVOVULUS	WILD BUCKWHEAT		SCREEN	#9 TRIANGLE	GOOD		100	100		
1116	RAPHANUS	SATIVUS	RADISH	WILD BUCKWHEAT	CONVOVULUS	WILD BUCKWHEAT	REMOVE WILD BUCKWHEAT	SCREEN	11/64 TRIANGLE	GOOD	99	100	100	THIS WAS DICON RADISH FOR SPROUTING AND WAS LARGER THAN MOST RADISH THAT WE HAD SEEN.	USE 11/64 WOVEN WIRE SCREEN TO REMOVE WILD BUCKWHEAT FROM DICON RADISH

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848	RAPHANUS	SATIVUS	RADISH	RAPHANUS	SATIVUS	RADISH	REMOVE OUT-OF-HULL RADISH SEED WITH COLOR SORTER.	COLOR SORTER	FILTER: 61,LIGHT SENS: 70, DELAY: 30, SLIT: .09"	GOOD	97	97	100		SORTING RADISH SEED FOR LIGHT SEEDS WITHOUT SEED COATS CAN BE ACCOMPLISHED.
637	RAPHANUS	SATIVUS	RADISH	SCLEROTIA		SCLEROTIA	SCLEROTIA	MAGNETIC		GOOD		70		BOUNCE PLATE, SCREENS AND PNEUMATIC SEPARATOR WERE INEFFECTIVE.	THE FRICTION SEPARATORS WERE THE MOST EFFECTIVE AT REMOVING THE SCLEROTIA.
								VELVET ROLL		FAIR		60			
								FRICTION	1 FOOT BELT	GOOD		80			
653	RAPHANUS	SATIVUS	RADISH	SCLEROTIA		SCLEROTIA	SCLEROTIA	FRICTION	3 FOOT BELT	GOOD		92			ATTEMPTS WERE UNSUCCESSFUL. THE BEST SEPARATION REMOVED 95% OF THE SCLEROTIA WITH 33% CROP LOSS.
668	RAPHANUS	SATIVUS	RADISH	SCLEROTIA		SCLEROTIA	REMOVE SCLEROTIA	SCREEN	#6 ROUND-HOLE			80			BEST RESULTS OBTAINED WITH #6 ROUND-HOLE SCREEN WHICH REMOVED 80% OF SCLEROTIA WITH 33% CROP LOSS. VIBRATOR AND PNEUMATIC SEPARATORS WERE INEFFECTIVE.
669	RAPHANUS	SATIVUS	RADISH	SCLEROTIA		SCLEROTIA	REMOVE SCLEROTIA	FRICTION	1 FT BELT			96			SAMPLE WAS RUN FOUR TIMES THROUGH FRICTION SEPARATOR.
1148	RAPHANUS	SATIVUS	DAIKON RADISH	SCLEROTINIA	SP	SCLEROTIA	WHAT SIZE INDENTS TO CLEAN SCLEROTIA FROM DAIKON	INDENT CYLINDER	4.0MM	FAIR		50		PROCESSOR PLANS TO RUN TWO INDENTS WITH THE 4MM TO LIFT ALL THE CROP AND THE 3.25MM TO PULL SOME SHORT CONTAMINANTS OUT OF THE CROP. OTHER CONT	INDENT CYLINDER CAN BE USED TO REMOVE LONG AND SHORT SCLEROTIA FROM RADISH BUT THE MATERIAL WILL STILL HAVE TO BE RUN THROUGH THE COLOR SORTER BEFORE FINAL PURITY IS MET.
				SCLEROTINIA	SP	SCLEROTIA		INDENT CYLINDER	3.25MM	FAIR		25			
				SCLEROTINIA	SP	SCLEROTIA		SPIRAL		GOOD		90			
				SCLEROTINIA	SP	SCLEROTIA		VIBRATORY		GOOD		87			
846	RAPHANUS	SATIVUS	RADISH			SCLEROTIA	REMOVE SCLEROTIA	FRICTION	2 PASSES, CARPET BELT, SCOTCH-BRIGHT BAR	FAIR	99	98	99	SAMPLE WAS HIGHLY POLISHED FROM MANY PREVIOUS MILLING OPERATIONS, SO THE FRICTION SEPARATOR WAS NOT AS EFFECTIVE AS EXPECTED.	BECAUSE THE SEED WAS POLISHED FROM PREVIOUS MILLING OPERATIONS, RESULTS WERE MARGINAL IN TERMS OF MEETING THE SPECIFICATIONS. THE COLOR SEPARATOR CAN BE USED AND WILL MEET THE REQUIRED PURITY, BUT WITH LOWER CAPACITY AND HIGHER MACHINE COST.
967	RAPHANUS	SATIVUS	BLACK-EYED SUSAN		SATIVUS	RADISH, DECORTICATED	DETERMINE THE SPECTURM DIFFERENCE BETWEEN NORMAL RADISH ANDÿDECORTICATED RADISH.	COLOR SORTER	NO. 61 WRATTEN FILTER	FAIR	99	99	99		LARGEST DIFFERENCES WERE BETWEEN 550 AND 800 NM.
1252	RAPHANUS	SATIVUS	RADISH				HELP SET UP CONDITIONING PLANT FOR RADISH AND OTHER VEGETABLE SEEDS	VIBRATORY		FAIR	99	68	100		
1019	RATIBIDA	COLUMNARIS	RED CONEFLOWER	CUSCUTA		DODDER		VIBRATORY	SANDPAPER	GOOD		95		277 LBS. WITH 40 DODDER/LB.	USE 6X20 SCREEN. USE 2.5 MM INDENT CYLINDER. USE VIBRATORY.
				CUSCUTA		DODDER		INDENT CYLINDER	2.5MM	GOOD		95			
				CUSCUTA		DODDER		SCREEN	6X20	GOOD		90			
1030	RATIBIDA	COLUMNARIUS	CONEFLOWER	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC		FAIR				FORMERLY UNDER SAMPLE #736.	
				INERT		INERT		VIBRATORY		FAIR					
1185	RATIBIDA	COLUMNIFERA	PRAIRIE CONEFLOWER	INERT		INERT	THRESH AND SEPARATE; TEST LAH HULLER SCARIFIER	SCARIFIER	LAH W/#7 MANTLE	GOOD				M	
				INERT		INERT		SCARIFIER	LAH W/#10 MANTLE	GOOD					
				INERT		INERT		SCREENS	SEQ ABOVE PLUS 6-1/2 RH TOP AND 6X26 WW BOTTOM	GOOD					
				INERT		INERT		INDENT CYLINDER	SEQ 3.75 MM POCKET	GOOD					
				INERT		INERT		GRAVITY	SEQ KAMAS W SMALL DECK	GOOD					
1064	RATIBIDA	PINNATA	TALL PRAIRIE CONEFLOWER												
1170	RUDBECKIA	HIRTA	BLACK-EYED SUSAN	HYPOCHAERIS	RADICATA	SPOTTED CATSEAR	REMOVE MISC. WEEDS INCLUDING SPOTTED CATSEAR (FALSE DANDELION) AND MULLEN	SCREENS	SEQ 6X36	FAIR				THIS SAMPLE REPRESENTED A	USE 6X36 WW, PNEUMATIC (SDB @15) AND 1.5MM AND 2.1MM INDENT CYLINDER TO LOWER THE AMOUNT OF WEED SEED, INCLUDING SPOTTED CATSEAR AND MULLEN, IN BLACK-EYED SUSAN SEED.
				VERBASCUM				PNEUMATIC	SEQ SDB @ 15	FAIR					
				AMARANTHUS		PIGWEED		INDENT CYLINDER	SEQ 1.5MM AND 2.1MM	FAIR					
947	RUDBECKIA	HIRTA	BLACK-EYED SUSAN	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL, OXEYE DAISY AND WALL BEDSTRAW.	SCREENS	6X32 OVER 6X40	GOOD					56 G OF BLACK-EYED SUSAN WAS REMOVED FROM AN ORIGINAL SAMPLE OF 68G. FINAL PURITY NOT KNOWN.
				CHRIPONTHEMUM	LEUCANTHEMUM	OXEYE DAISY									
				GALIUM	PARISIENSE	WALL BEDSTRAW									
923	SACCHARUM	OFFICINARUM	SUGARCANE	FUZZ		FUZZ	REMOVE FUZZ. SEED IN OR OUT OF HULL IS OK.	SCARIFIER	SEQ.FILAMENT, 50G, 20MIN						SEED WAS SALVAGED FROM THE 6X26 WIRE SCREEN (SEED IN HULL) AND FROM THE .038" ROUND-HOLE (SEED OUT OF HULL). THERE WAS VERY LITTLE MECHANICAL DAMAGE TO THE SEED.
				FUZZ		FUZZ		SCREENS	SEQ.#5 1/2 RD OVER 6X26 WIRE OVER .038 RD						
				FUZZ		FUZZ		PNEUMATIC	SEQ.FRACTION OVER 6X26						

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				FUZZ		FUZZ		PNEUMATIC	SEQ.FRACTION OVER .038"						
928	SACCHARUM	OFFICINARUM	SUGARCANE	FUZZ		FUZZ	REMOVE FUZZ FROM SEED AND CLEAN	SCARIFIER	SEQ.FILAMENT						FRACTIONS WERE SENT TO SUBMITTER FOR GERMINATION TESTS.
				FUZZ		FUZZ		SCREENS	SEQ.5 1/2 RD OVER 6X26 OVER .038 RD						
				FUZZ		FUZZ		PNEUMATIC	SEQ.						
1082	SACCHARUM	OFFICINARUM	SUGARCANE	INERT		INERT	THRESH TO REMOVE FUZZ AND DEHULL SEED, THEN CLEAN.	SCARIFIER	SEQ.1.2 MIN, .011" FILAMENT	GOOD					THE FILAMENT THRESHER AND AIR PRESSURE SCARIFIER DID VERY WELL AT THRESHING THE SEED, WITH THE AIR PRESSURE SCARIFIE
				INERT		INERT		SCREENS	SEQ.1.#5 1/2 OVER 6X26 W OVER .038 RD	GOOD					
				INERT		INERT		SCARIFIER	SEQ.2.AIR PRESS, 50PSI, 25 SEC	GOOD					
				INERT		INERT		SCREENS	SEQ.2.#5 1/2 OVER 6X26W OVER .038 RD	GOOD					
				INERT		INERT		SCARIFIER	SEQ.3.BRUSH MACH, #26 MANTLE, 15 SEC.	FAIR					
				INERT		INERT		SCREENS	SEQ.3.#5 1/2 OVER 6X26W OVER .038 RD	GOOD					
356	SANGUISORBA		BURNET	AVENA	FATUA	WILD OATS	REMOVE WILD OATS, VETCH, GRASS SEED AND INERT MATERIAL.	INDENT DISC	SEQ.SIZE 6-V DISC	GOOD					USED TOGETHER, THE 6-V INDENT DISC AND THE VIBRATOR SALVAGED 94% OF THE LOT WITH ONLY .6% IMPURITIES.
				VICIA		VETCH		VIBRATORY	SEQ.SANDPAPER DECK	GOOD					
				GRASS		GRASS		VIBRATORY	SEQ.SANDPAPER DECK	GOOD					
				INERT		INERT		VIBRATORY	SEQ.SANDPAPER DECK	GOOD					
AVENA	SCABIOSA		SCABIOSA	INERT		INERT	REMOVE STEMS AND LEAVES	VIBRATORY	REJECT FRACT RERUN TWICE	GOOD					THE VIBRATOR CONCENTRATED THE INERT MATERIAL IN 5% OF THE ORIGINAL LOT. THE CLEAN FRACTION HAD ONLY A TRACE OF STEMS.
305	SCABIOSA		SCABIOSA	INERT		INERT	REMOVE STEMS AND LEAVES. THIS WAS FIELD RUN MATERIAL.	VIBRATORY	SEQ.FINE TEXTURED DECK	GOOD					THE VIBRATOR FOLLOWED BY SCREENING AND BLOWING REMOVED MOST OF THE STEMS, LEAVES AND EMPTY SEEDS. BRIEF TRIALS INDICATED THAT MOST OF THE REMAINING LONG STEMS AND LEAVES COULD BE REMOVED BY AN INDENT DISC.
				STEMS		STEMS		SCREEN	SEQ.5-1/2X3/4,DOWNHILL FRACT	GOOD					
				TRASH		TRASH		PNEUMATIC	SEQ.UPHILL FRACT FROM VIB.	GOOD					
				LONG STEMS		LONG STEMS		INDENT DISC	SEQ.	GOOD					
1224	SCABIOSIA		SCABIOSIA	SCABIOSIA		FIELD RUN SCABIOSIA	GENERAL CONDITIONING	SCREEN	SEQ 24/64 RH TOP, 4X20 WW BOTTOM	GOOD				WITH THIS SEQUENCE 20 GRAMS OF PURE SEED WERE RETURNED FROM 500 GRAMS OF ORIGINAL MATERIAL WITH VERY LITTLE LOSS	
				SCABIOSIA		FIELD RUN SCABIOSIA		SCARIFIER	SEQ LAH W/#7 WW MANTLE	GOOD					
				SCABIOSIA		FIELD RUN SCABIOSIA		AIR-SCREEN	SEQ 6/64 RH TOP, 4X20 WW BOTTOM WITH HIGH AIR SPEED						
1213	SCABIOSIS	ARVENSIS	SCABIOSIA				REMOVE INERT (CLEAN)								
457	SCHIZANTHUS		BUTTERFLY FLOWER	WEEDS		WEEDS	REMOVE WEEDS.	SCREENS	6X20 OVER 6X26	FAIR					ONLY THE 6X20 OVER THE 6X26 SCREEN AND THE 1/22 OVER THE 1/25 SHOWED ANY PROMISE. BOTH SCREEN PAIRS REMOVED LARGE AND SMALL WEED SEEDS WITH CROP LOSS.
				WEEDS		WEEDS		SCREENS	1/22 OVER 1/25	FAIR		83			
				WEEDS		WEEDS		VIBRATORY		POOR					
				WEEDS		WEEDS		VELVET ROLL		POOR					
				WEEDS		WEEDS		PNEUMATIC		POOR					
				WEEDS		WEEDS		INDENT CYLINDER		POOR					
1217	SCIRPUS	MICROCARPUS	SMALL FRUITED BULLRUSH				DETERMINE CONDTIONING SEQUENCE							THIS MATERIAL IS PART OF THE WETLANDS RESTORATION/CONSTRUCTION RESEARCH PROGRAM BEING CONDUCTED AT OSU.	
251	SECALE	CEREALE	RYE	ERGOT		ERGOT	REMOVE ERGOT	PNEUMATIC		GOOD		100	100		THE PNEUMATIC SEPARATOR PERFORMED THE BEST, DROPPING 75% OF THE LOT FREE OF ERGOT.
				ERGOT		ERGOT		ELECTROSTATIC		POOR					
341	SECALE	CEREALE	RYE	ERGOT		ERGOT	REMOVE ERGOT	ELECTROSTATIC		FAIR		71		MANY MACHINES WERE TRIED INDIVIDUALLY, BUT RESULTS WERE NOT AS GOOD AS THOSE OBTAINED IN THE PROCESSES ABOVE.	BEST RESULTS WERE WITH THE ELECTROSTATIC SEPARATOR, WHICH REDUCED ERGOT TO 9/LB WITH 94% YIELD, AND THE SCREENS/PNEUMATIC/ELECTROSTATIC/COLOR SEPARATOR SEQUENCE, WHICH REMOVED ALL ERGOT WITH A YIELD OF 59%.
				ERGOT		ERGOT		SCREENS	SEQ.#8-1/2 OVER 1/13	FAIR					
				ERGOT		ERGOT		PNEUMATIC	SEQ.	FAIR					
				ERGOT		ERGOT		ELECTROSTATIC	SEQ.	FAIR					
				ERGOT		ERGOT		COLOR SORTER	SEQ.	FAIR		100	100		
245	SECALE	CEREALE	RYE				FIND THE ROUND HOLE SCREENS THAT SPAN THE SEED RANGE AND DETERMINE RANGE IN SEED DIMENSIONS FOR 50 SEEDS.								A #8 SCREEN DROPS EVERYTHING EXCEPT AN OCCASIONAL SEED AND A 1/16 SCREEN HOLDS EVERYTHING.

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481	SECALE	CEREALE	RYE				REMOVE EMBRYO PIECES FROM ENDOSPERM PIECES USING ELECTROSTATIC SEPARATOR.	ELECTROSTATIC	15KV, ELECTRODE IN PINNING POSITION	GOOD				SAMPLE HAD BEEN THROUGH HAMMERMILL AND REDUCED TO SMALL PARTICLES.	THE ELECTROSTATIC SEPARATOR DID A VERY GOOD JOB OF CONCENTRATING THE EMBRYO PIECES.
721	SEQUOIA	SEMPERVIRENS	REDWOOD	INERT		INERT	REMOVE INERT MATERIAL ("ROSEBUDS", NEEDLES AND CONE PARTS).	VIBRATORY		FAIR				AIR SEPARATION AND SCREENING WERE NOT TRIED BECAUSE THE SUBMITTER HAD ALREADY TRIED THESE.	EACH MACHINE REMOVED SOME INERT MATERIAL, BUT NOT ENOUGH FOR THE SEPARATION TO BE CONSIDERED SATISFACTORY. THE VIBRATOR DID REMOVE MOST OF THE "ROSEBUDS" WHICH WAS THE PRIMARY CONTAMINANT.
				INERT		INERT		FRICTION		FAIR					
				INERT		INERT		GRAVITY		FAIR					
743	SEQUOIA	SEMPERVIRENS	REDWOOD	SEQUOIA	SEMPERVIRENS	REDWOOD	REMOVE LOW GERMINATION SEED	GRAVITY		GOOD				THE SAMPLE WAS RUN TWICE OVER THE GRAVITY SEPARATOR.	INITIAL PURITY WAS 13% NORMALLY DEVELOPED SEEDS IN THE SAMPLE AND FINAL PURITY WAS 26% NORMALLY DEVELOPED SEEDS.
1228	SESAMUM	INDICUM	SESAME				REQUESTED INFORMATION CONCERNING CLEANING, DEHULLING AND ROASTING OF SESAME SEED.							THE FAX NO LISTED IS IN CARACUS, VENEZUALA	
606	SESAMUM		SESAME	INERT		INSECT DROPPINGS	REMOVE INSECT EXCRETA								MOST SEPARATING MACHINES WERE TRIED, BUT ALL WERE UNSUCCESSFUL.
1151	SITANION	HYSTRIX	BOTTLEBRUSH SQUIRRELTAIL	SITANION	HYSTRIX	BOTTLEBRUSH SQUIRRELTAIL	THRESH AND REMOVE AWNS	SCARIFIER	LAH #12 MANTLE	GOOD				THIS LOT WAS EXTREMELY TRASHY AND CONTAINED VERY LITTLE SEED BY WEIGHT. THE LAH SCARIFIER WITH #12 MANTLE SUCCESSFULLY BROKE UP THE MATERIAL MAKING SEPARATION OF THE SEED FROM THE CHAFF POSSIBLE.	
1259	SITANION	HYSTRIX													
301	SORGHUM	BICOLOR	SORGHUM	IPOMEA		MORNINGGLORY	REMOVE MORNINGGLORY.	VIBRATORY		GOOD					BEST RESULTS WERE WITH THE SPIRAL AND VIBRATOR WHICH SALVAGED 92.5% AND 92% OF THE CROP RESPECTIVELY AS CLEAN SEED.
				IPOMEA		MORNINGGLORY		SPIRAL		GOOD					
				IPOMEA		MORNINGGLORY		DRAPER		FAIR					
				IPOMEA		MORNINGGLORY		GRAVITY		POOR					
				IPOMEA		MORNINGGLORY		PNEUMATIC		POOR					
				IPOMEA		MORNINGGLORY		ELECTROSTATIC		POOR					
				IPOMEA		MORNINGGLORY		VELVET ROLL		POOR					
293	SORGHUM	BICOLOR	SORGHUM	SORGHUM	BICOLOR	BROKEN SORGHUM SEEDS	REMOVE BROKEN SEEDS AND TRASH.	SCREEN	SEQ. 1.6-1/2X3/4 SLOT						EITHER THE (6-1/2X3/4)/DRAPER SEQUENCE OR THE PNEUMATIC/DRAPER SEQUENCE WILL EVIDENTLY REMOVE TRASH AND BROKEN SEEDS FROM THIS SORGHUM SAMPLE.
				SORGHUM	BICOLOR	BROKEN SORGHUM SEEDS		DRAPER	SEQ. 1.						
				SORGHUM	BICOLOR	BROKEN SORGHUM SEEDS		PNEUMATIC	SEQ. 2.						
				SORGHUM	BICOLOR	BROKEN SORGHUM SEEDS		DRAPER	SEQ. 2.						
616	SORGHUM	BICOLOR	SORGHUM				MEASURE SORGHUM TO DETERMINE SCREEN SIZES.								RECOMMENDED SCREEN SIZES SENT TO SUBMITTER.
579	SORGHUM	HALEPENSE	JOHNSONGRASS	INERT		INERT	SALVAGE JOHNSONGRASS SEED FROM SORGHUM SCREENINGS.	VIBRATORY	SANDPAPER DECK	FAIR				UNSATISFACTORY RESULTS WERE ACHIEVED WITH SCREENS, VERTICAL AIR COLUMN, SPIRAL, VELVET ROLL, INCLINED CHUTE AND BOUNCE PLATE SEPARATOR.	THE VIBRATOR AND GRAVITY TABLE SHOW SOME POSSIBILITIES, BUT ARE LOW CAPACITY. NO EFFECTIVE METHOD WAS FOUND.
				INERT		INERT		GRAVITY	SANDPAPER DECK	POOR					
291	SORGHUM	SUDANENSE	SUDANGRASS	IPOMEA		MORNINGGLORY	REMOVE MORNINGGLORY	VELVET ROLL	144RPM, 16 DEG, LIGHT FEED	POOR		100	100		NO RESULTS WERE SATISFACTORY. THE VELVET ROLL DID THE BEST, REMOVING ALL THE CONTAMINANT, BUT ONLY RECOVERING 33% OF THE LOT.
				IPOMEA		MORNINGGLORY		SCREENS		POOR					
				IPOMEA		MORNINGGLORY		VIBRATORY		POOR					
				IPOMEA		MORNINGGLORY		PNEUMATIC		POOR					
				IPOMEA		MORNINGGLORY		DRAPER		POOR					
				IPOMEA		MORNINGGLORY		GRAVITY		POOR					
849	SPHAERALCEA	AMBIGUA	GLOBEMALLOW	BRASSICA		MUSTARD	REMOVE MUSTARD AND MISC. WEED SEEDS.	SCREEN	SEQ. 6X20 WOVEN WIRE						SCREENING AND PNEUMATIC SEPARATION SUCCESSFULLY CLEANED THE GLOBEMALLOW SEED TO A PURITY OF 90.7% WITH ABOUT 10% CROP LOSS.
								SCREEN	SEQ. 1/17 ROUND HOLE						
								SCREEN	SEQ. 1/24 ROUND HOLE						
								PNEUMATIC	SEQ.	GOOD			91		
671	SPINACIA	OLERACEA	SPINACH	GALIUM		BEDSTRAW	REMOVE BEDSTRAW AND SCLEROTIA	FRICTION	VINYL BELT, WEATHERSTRIP BAR	GOOD		99			BEST RESULTS WERE OBTAINED IN THE FRICTION SEPARATOR WITH 99% OF THE BEDSTRAW REMOVED AND A LOSS OF 11.5%. THE FRICTION SEPARATOR WAS UNSUCCESSFUL REMOVING SCLEROTIA.
				GALIUM		BEDSTRAW		SCREEN	7 1/2 ROUND-HOLE	FAIR		82			
				GALIUM		BEDSTRAW		VIBRATORY		FAIR		95			
				GALIUM		BEDSTRAW		DRAPER		FAIR		94			
1134	SPINACIA	OLERACEA	SPINACH	INERT		SOIL	REMOVE INERT	SCARIFIER	LAH W/#7 WW MANTLE	GOOD		90		THIS LOT WAS TO BE SHIPPED TO JAPAN SO REQUIRED LOW SOIL LEVEL. LAH SCARIFIER BROKE SOIL WITH VERY LITTLE APPARENT DAMAGE TO THE CROP. NO PEAT WAS FOUND IN EITHER THE INITIAL OR FINAL MATERIAL	USE LAH SCARIFIER TO REMOVE SOIL AND PEAT FROM SPINACH SEED.

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				INERT		PEAT		SCARIFIER	LAH W/#7 WW MANTLE	GOOD					
1137	SPINACIA	OLERACEA	SPINACH	INERT		SOIL		SCARIFIER	LAH W/#7 WW MANTLE	GOOD			0.5	BRUSH DEBEARDER DID A GOOD JOB OF BREAKING SOIL PARTICLES. NO PEAT WAS FOUND SO IT WAS NOT KNOWN WHETHER THE SCARIFIER WOULD BREAK THESE PARTICLES. THIS LOT WAS FOR SHIPMENT TO JAPAN AND THEREFORE NEEDED 0.03% OR LESS SOIL.	USE BRUSH DEBEARDER TO BREAK SOIL PARTICLES IN SPINACH SEED.
				INERT		PEAT		SCARIFIER	LAH W/#7 WW MANTLE				0		
493	SPINACIA	OLERACEA	SPINACH	MISC		MISC	REMOVE WHEAT, MUD CLODS AND GRASS SEED.	SCREENS		POOR					THE INDENT DISC AND CYLINDER WORKED VERY WELL. A #9 CYLINDER MIGHT WORK EVEN BETTER THAN THE #10.
				MISC		MISC		INDENT CYLINDER	#10 CYLINDER	GOOD					
				MISC		MISC		INDENT DISC	V-5 DISC	GOOD					
756	SPINACIA	OLERACEA	SPINACH	RAPHANUS	RAPHANISTRUM	WILD RADISH	REMOVE WILD RADISH	VIBRATORY	DECK=SMOOTH AL., SIDESLOPE=1, BACKSLOPE=9, FEED=6, SPEED=23	GOOD	99	89	100		THE VIBRATOR, SPIRAL, BOUNCE PLATE AND DRAPER SEPARATED THE MIXTURE WITH SIMILAR SELECTIVITIES. THE SPIRAL HAD THE GREATEST CAPACITY AND LOWEST CROP LOSS.
				RAPHANUS	RAPHANISTRUM	WILD RADISH		SPIRAL	TWO RUNS ON LARGE SEED FLIGHT	GOOD	99	73	100		
				RAPHANUS	RAPHANISTRUM	WILD RADISH		OTHER	BOUNCE PLATE SEPARATOR	GOOD	99	78	100		
								DRAPER		FAIR	99	93	100		
				RAPHANUS	RAPHANISTRUM	WILD RADISH		PNEUMATIC	6"X6" CONTINUOUS FLOW	FAIR	99	60	100		
634	SPINACIA	OLERACEA	SPINACH	RAPHANUS	RAPHANISTRUM	WILD RADISH	SCLEROTIA	SCREEN	SEQ. 8 1/2 ROUND-HOLE				100		NO SEPARATION WAS ACHIEVED WITH ANY SEPARATOR EXCEPT THE SCREENS AND THEY COULD NOT PERFORM THE SEPARATION WITH THE REQUIRED MAXIMUM CROP LOSS OF 10%.
				SCLEROTIA		SCLEROTIA		SCREEN	SEQ. #9 ROUND-HOLE	POOR		100			
198	SQUIRMY		PINK BOLLWORM	TRASH		TRASH	CONCENTRATE AS MANY WORMS AS POSSIBLE IN A SMALL BULK OF COTTON TRASH (MAY VARY FROM LONG STEMMY MATERIAL TO SMALL STEMS, BROKEN SEEDS, ETC.).	PNEUMATIC	LONG STEMMY MATERIAL	GOOD		95			THE PNEUMATIC SEPARATOR GAVE VERY GOOD RESULTS WITH LONG STEMMY MATERIAL, WHILE THE ELECTROSTATIC SEPARATOR WORKED VERY WELL WITH THE SHORT MATERIAL. SEE ORIGINAL REPORT FOR EX....TENSIVE DESCRIPTION OF THE PROBLEM AND POSSIBLE SOLUTIONS.
				TRASH		TRASH		PNEUMATIC	SHORT TRASH	POOR					
				TRASH		TRASH		SCREEN	#6	FAIR		35			
				TRASH		TRASH		ELECTROSTATIC	SHORT TRASH, 20KV, HOR=2,ROT=5.5,VER=10.5,DIV=95DEG	GOOD		70			
836	STATICE	SINUATA	STATICE	INERT		INERT	SEPARATE SEED FROM FLOWER HEAD WITH BELT THRESHER AND CLEAN.	BELT THRESHER	SEQ.0" CLEARANCE						THE UNLIFTED FRACTION IN THE BLOWER CONTAINED GOOD SEED, SOME BROKEN SEEDS AND SOME FLOWER PARTS. ALL FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.
				INERT		INERT		SCREEN	SEQ.8 1/2 ROUND-HOLE						
				INERT		INERT		PNEUMATIC	SEQ.						
1175	STATICE	TATARICA	GERMAN STATICE	STATICE	TATARICA	GERMAN STATICE SEED ON PLANT	THRESH SEED FROM PLANTS AND REMOVE FROM HULLS	SCARIFIER	SEQ LAH W/#5 MANTLE, LAH W#14 MANTLE	GOOD				THIS MATERIAL WAS HAND HARVESTED PLANTS STILL CONTAINING SEEDS. A SEQUENCE OF BRUSH DEBEARDING TWO TIMES FIRST WITH #5 WW MANTLE THEN #5 WW MANTLE FOLLOWED BY SCREENING AND AIR RETURNED 6.4% OF THE MATERIAL BY WEIGHT AS SEED.	
				STATICE	TATARICA	GERMAN STATICE SEED ON PLANT		AIR-SCREEN	SEQ 16X16 TOP, 30X30 BOTTOM, AIR	GOOD					
573	STENOTAPHRUM	SECUNDATUM	ST. AUGUSTINE GRASS				THRESH AND CLEAN.	BELT THRESHER		POOR					THE THRESHER WAS NOT NEARLY SEVERE ENOUGH TO THRESH THE "HAND-HARVESTED" SAMPLE. THE "PROCESSED SEED" WAS SEPARATED WITH GOOD RESULTS WITH THE BLOWER.
1266	STIPA	LEMMONII						PNEUMATIC		GOOD					
1129	STYLOSANTHES	HUMILIS	TOWNESVILLE LUCERNE	HULLS	INERT	HULLS	DETERMINE BEST METHOD, SUITABLE FOR AFRICAN PEASANT COOPERATIVES AND ASSOCIATIONS, FOR THRESHING AND CLEANING SEED.	BELT THRESHER	SEQ1.4 PASSES, GOODYEAR "PEBBLE TOP", NO CLEARANCE	FAIR				R. G. GRIFFITHS' PHONE NO.: 61-32-15. ANY ATTEMPT TO INCREASE THE PERFORMANCE OF THE SCARIFIER RESULTED IN EXCESS ABRASION TO THE SEED BECAUSE OF THE LONGER PERIOD OF TIME THE SEED WAS HELD INSIDE THE SCARIFIER.	THE BEST THRESHING JOB WAS DONE BY THE RUB-BOARD USING THE GOODYEAR "PEBBLE-TOP" SURFACE. FOR LARGER QUANTITIES, THE BELT THRESHER WITH GOODYEAR "PEBBLE-TOP" DOES THE BEST, ALTHOUGH IN 4 PASSES IT ONLY RELEASED 38% OF THE SEED. THE
				HULLS	INERT	HULLS		SCREEN	SEQ1.14X14WW	GOOD					
				PARTICLES	INERT	PARTICLES		PNEUMATIC	SEQ1.	GOOD			95		
				HULLS	INERT	HULLS		OTHER	RUB-BOARD	GOOD					
				HULLS	INERT	HULLS		SCARIFIER		POOR					
				HULLS	INERT	HULLS		OTHER	BRUSH MACHINE, VARIOUS MANTLES	POOR					
627	TAGETES		MARIGOLD	INERT		INERT	REMOVE INERT MATERIAL, STEMS, AND SHRIVELED FLOWERS STILL ATTACHED TO SEED.	BELT THRESHER	SEQ.					GOOD RESULTS WERE OBTAINED WITH THE ABOVE SEQUENCE.	
				INERT		INERT		PNEUMATIC	SEQ.						

NO	CROP GENUS	CROP SPECIES	CROP COMMON NAME	CONTAMINANT GENUS	CONTAMINANT SPECIES	CONTAMINANT COMMON NAME	PROBLEM	MACHINE USED	OPERATING PARAMETERS	QUALITY	IP	CR	FP	NOTES	CONCLUSION
				INERT		INERT		SCREEN	SEQ. 1/15 X 1/2	GOOD					
649	TAGETES		MARIGOLD	INERT		INERT	REMOVE STEMS, FLOWERS AND INERT MATERIAL.	SCREENS	SEQ.1/18X3/4 SLOT OVER 1/23 ROUND						THE ABOVE SEQUENCE OF SCREENS/THRESHER/SCREEN/PNEUMATIC/INDENT CYLINDER YIELDED A FINAL PURITY OF 97% WITH A 15%LOSS.
								BELT THRESHER	SEQ.						
								SCREEN	SEQ.1/23 ROUND-HOLE						
								PNEUMATIC	SEQ.						
								INDENT CYLINDER	SEQ.#16 CYLINDER	GOOD			97		
712	TAGETES		MARIGOLD	INERT		INERT	WORK OUT PROCESSING PLANS FOR BULK LOTS OF THRESHED MARIGOLD. SAMPLE CONTAINS STEMS, PETALS, DIRT AND FLOWER HEADS.	SCREENS	SEQ.5/64X3/4 OVER 1/20X1/2 OVER 1/24X1/2 OVER 30X30					THE ELECTROSTATIC SEPARATOR MADE NO SEPARATION.	THE CONTAMINANT WAS VERY SIMILAR, PHYSICALLY, TO THE CROP IN THIS SAMPLE. THE
				INERT		INERT		PNEUMATIC	SEQ. 130FPM				50		
				INERT		INERT		GRAVITY	SEQ.		50				
				INERT				VIBRATORY	SEQ.						
906	TAGETES		MARIGOLD	INERT		INERT	REMOVE FLOWER RECEPTACLES, STICKS AND PETALS.	AIR-SCREEN	SEQ.#12 OVER 4X18W OVER 4X30 W						NO RESULTS FROM THE ABOVE CLEANING SEQUENCE AVAIBLE.
				INERT		INERT		INDENT CYLINDER	SEQ.6MM CYLINDER						
				INERT		INERT		INDENT CYLINDER	SEQ.12MM CYLINDER						
				INERT		INERT		GRAVITY	SEQ.						
409	TAGETES		MARIGOLD	TAGETES		MARIGOLD	REMOVE LOW GERMINATION SEED.	PNEUMATIC		FAIR					PRELIMINARY SEPARATING TRIALS WITH THE PNEUMATIC SEPARATOR REMOVED SOME POOR SEED, BUT ONLY WITH THE LOSS OF SOME GOOD SEED ALSO.
801	TAGETES		MARIGOLD	TAGETES		MARIGOLD WITH TAILS	REMOVE TAILS FROM MARIGOLD SEEDS USING FILAMENT THRESHER WITH WIRE FINGERS.	SCARIFIER	2000 RPM, .013" MUSIC WIRE						SAMPLES THRESHED FOR VARYING LENGTHS WERE SENT TO SUBMITTER.
946	TAGETES		MARIGOLD	TAGETES			DETERMINE EFFECTIVENESS OF BRUSH-TYPE HULLER/SCARIFIER ON VARIOUS SEED AND LEAF CROPS, ESPECIALLY MARIGOLD.	SCARIFIER						OTHER SEEDS W	MOST EFFECTIVE WAS BATCH OPERATION FOR ONE TO TWO MINUTES WITH A SMALLER SCREEN SIZE. ABOUT 90% OF TAILS WERE REMOVED FROM THE MARIGOLD SEED. CONTINUOUS OPERATION WAS INEFFECTIVE.
964	TAGETES		MARIGOLD	TAGETES		MARIGOLD WITH TAILS	DETAIL MARIGOLD SEED.	BELT THRESHER		POOR					BECAUSE OF THE SEED SHAPE, THE BELT THRESHER WAS NOT EFFECTIVE EVEN AT ITS MOST AGGRESSIVE SETTINGS. A #12 BRUSH MACHINE MANTLE WRAPPED WITH RUBBER FABRIC TO BLOCK OFF THE HOLES DID FAIRLY WELL. A MANTLE WITH SMALLER OPENINGS MIGHT PERFORM BETTER.
				TAGETES		MARIGOLD WITH TAILS		SCARIFIER	BRUSH MACH. #12 MANTLE W/RUBBER BACKING	FAIR					
1034	TAGETES		MARIGOLD	TAGETES		MARIGOLD WITH TAILS	REMOVE TAILS	BELT THRESHER		POOR				FORMERLY UNDER SAMPLE #736	
1178	TAGETES		MARIGOLD	TAGETES		MARIGOLD WITH TAIL	DETAIL AND CLEAN	SCARIFIER	LAH					TWO VARIETIES OF MARIGOLD TO BE DETAILED AND CLEANED. ONE WITH LOT NO 3145	
1166	TAGETES		MARIGOLD				DEBEARD MARIGOLD. ALSO WORK ON OTHER SPECIES INCLUDING DAHLIA, ALYSSUM, GAILLARDIA, PANSY, AND WILDFLOWER MIX.								
1095	TAGETESÿTAGETES		MARIGOLD	TAGETES		MARIGOLD WITH TAILS	DETAIL	SCARIFIER	LAH W/#10SQ W/RUBBER BACK	GOOD				THIS MATERIAL WAS RUN CONTINUOUSLY. SEED WAS DISCHARGED THROUGH FRONT OPENING. RESULTING SEED WAS SCREENED WITH 4X26WW SCREEN THEN SEPARATED IN AIR COLUMN.	USE LAH HULLER SCARIFIER WITH #10 SQUARE WIRE MANTLE. USE APPROX 4X26 WW SCREEN AND AIR COLUMN TO CLEAN RESULTING SEED.
1057	TAIWANIA	CRYPTOMERIOIDES		THIN SEEDS		THIN SEEDS	THE SEPARATION NEEDED WAS NOT EVIDENT, BUT THIN SEEDS WERE SEPARATED OUT.							THIS PROBLEM SAMPLE FORMERLY PART OF #675. SEE #675 AND #1056 FOR SIMILAR PROBLEMS.	THE FRICTION, VIBRATOR AND PNEUMATIC SEPARATORS EFFECTIVELY REMOVED THE THIN SEEDS.
596	THUJA	PLICATA	WESTERN RED CEDAR	LEAF MATERIAL		LEAF MATERIAL	REMOVE LEAF MATERIAL	PNEUMATIC		GOOD					THE PNEUMATIC SEPARATOR LIFTED THE SEED WITH SOME LOSS OF SEED, BUT THE SUBMITTER WAS PLEASED WITH THE RESULTS.
159	TRIFLOIUM	PRATENSE	KENLAND RED CLOVER	RUMEX		DOCK	REMOVE DOCK	PNEUMATIC		FAIR	98				BEST RESULTS WITH THE VELVET ROLLS.
				RUMEX		DOCK		VELVET ROLL	2 PASSES, 11 DEG, 260RPM	GOOD	98	65	100		
				RUMEX		DOCK		ELECTROSTATIC		POOR	98				
				RUMEX		DOCK		GRAVITY		POOR	98				
				RUMEX		DOCK		VIBRATORY		POOR	98				
978	TRIFOIUM	PRATENSE	RED CLOVER	CUSCUTA		DODDER	REMOVE DODDER	VELVET ROLL						DISCUSSION CENTERED AROUND METHODS TO REMOVE DODDER TO BRING A VERY LARGE LOT OF RED CLOVER TO CERTI	USE VELVET ROLL TO REMOVE DODDER FROM RED CLOVER

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1099	TRIFOLIUM	AMBIGUUM	KURA CLOVER	TRIFOLIUM	AMBIGUUM	UNSCARIFIED KURA CLOVER	SCARIFY	SCARIFIER	ABRASIVE EXPERIMENTAL 30LB/HR, 15DEG, 500RPM	POOR	54		55	THIS MATERIAL WAS FOUND TO CONTAIN 54% GERMINABLE SEED AND 7% HARD SEED IN THE ORIGINAL. AFTER SCARIFICATION THE LOG CONTAINED 55% GERMINABLE SEED AND 1% HARD. SUGGESTING THAT SCARIFICATION NEITHER HELPED NOR HARMED THE SEED LOT.	
1152	TRIFOLIUM	AMBIGUUM	KURA CLOVER	TRIFOLIUM	AMBIGUUM	KURA CLOVER	REMOVE SEED FROM HULL	SCARIFIER	LAH W/#7 SQ WIRE MANTLE	GOOD					
1168	TRIFOLIUM	DUBIUM	HOP CLOVER	TRIFOLIUM	REPENS	WHITE CLOVER	REMOVE WHITE CLOVER	DRAPER	VINYL BELT, HIGH SPEED	FAIR				THIS MATERIAL REPRESENTS SEVERAL 1000 LB LOTS WITH VARYING LEVELS OF CONTAMINATION. OF GREATEST CONCERN WAS THE WHITE CLOVER AT 1 TO 2%. THE MACHINES TESTED REMOVED A PORTION OF THE WHITE CLOVER AND OTHER WEEDS INCLUDING BLUEGRASS, WILD CARROT	A SEQUENCE OF SCREEN
				TRIFOLIUM	REPENS	WHITE CLOVER		PNEUMATIC	SEQ SDB 33% OPENING	GOOD	99	100	100		
				TRIFOLIUM	REPENS	WHITE CLOVER		SCREENS	SEQ 22X22 TOP 6X28 BOTTOM	GOOD	99	100	100		
56	TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER	ANTHEMIS	COTULA	DOGFENNEL	REMOVE CORN SPURRY, DOG FENNEL, SHEEP SORREL, ENGLISH CATCHFLY, FIELD MADDER AND INERT MATERIAL.	VELVET ROLL	225 RPM, 12.5 DEG, 2 PASSES	GOOD	96	97	100	THE PNEUMATIC SEPARATOR REMOVED ALL ENGLISH CATCHFLY, CORN SPURRY AND DOG FENNEL WITH 10% CROP LOSS. THE VIBRATOR HAS LIMITED POSSIBILITIES, BUT DID WELL AT REMOVING DOG FENNEL.	BEST RESULTS OBTAINED WITH THE VELVET ROLLS. 85.5% OF ORIGINAL SAMPLE WAS RECLAIMED AT A PURITY OF 99.9%.
				SPERGULA	ARVENSIS	CORN SPURRY		VIBRATORY		FAIR					
				RUMEX	ACETOSELLA	SHEEPSORREL		PNEUMATIC		FAIR					
				SILENE	GALLICA	ENGLISH CATCHFLY		ELECTROSTATIC		POOR					
10	TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER	RUMEX		SORREL	REMOVE SORREL	ELECTROSTATIC	18KV, HOR=8.25,VERT=6,ROT=3/5	FAIR					THE ELECTROSTATIC SEPARATOR DID A FAIR JOB REMOVING 40% BY VOLUME WITH NO SORREL, 55% WITH SOME SORREL AND 5% WITH MANY SORREL.
67	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	BRASSICA	RAPA CAMPESTRIS	BIRD RAPE	REMOVE BIRD RAPE AND WILD RADISH.	VIBRATORY	40X50 WIRE MESH DECK	FAIR	79	96	99		BEST RESULTS WERE HAD WITH THE VIBRATOR WHICH RECLAIMED 43% OF THE ORIGINAL SAMPLE AT 99% PURITY. THE ELECTROSTATIC SEPARATOR DID FAIRLY WELL RECLAIMING 40% AT 95% PURITY.
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		ELECTROSTATIC	21KV, VERT-6, HOR-7,ROT-3-3/8	FAIR	79	80	95		
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		PNEUMATIC		POOR					
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		SPIRAL		POOR					
425	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	BRASSICA	RAPA CAMPESTRIS	BIRD RAPE	REMOVE BIRD RAPE	SPIRAL		GOOD					THE SPIRAL, DRAPER, VIBRATOR AND MAGNETIC/DRAPER COMBINATION, ALL REMOVED MOST OF THE BIRD RAPE.
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		DRAPER	PLASTIC BELT	GOOD					
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		VIBRATORY	SANDPAPER DECK	GOOD					
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		MAGNETIC	SEQ.	GOOD					
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		DRAPER	SEQ.	GOOD					
				BRASSICA	RAPA CAMPESTRIS	BIRD RAPE		INDENT CYLINDER	#5 CYLINDER	POOR					
933	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	BURR		BURR	REMOVE SEED FROM BURR.	SCARIFIER	SEQ.1,FILAMENT	GOOD					BOTH THRESHING MACHINES GAVE ACCEPTABLE RE
				CHAFF		CHAFF		PNEUMATIC	SEQ.1	GOOD					
				BURR		BURR		BELT THRESHER	SEQ.2	GOOD					
				CHAFF		CHAFF		PNEUMATIC	SEQ.2	GOOD					
400	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	GERANIUM		WILD GERANIUM	REMOVE WILD GERANIUM.	VELVET ROLL		GOOD					THE VELVET ROLLS DID THE BEST, PRODUCING A FINAL PRODUCT THAT LOOKED CLEAN ENOUGH FOR CERTIFICATION.
				GERANIUM		WILD GERANIUM		MAGNETIC		FAIR					
				GERANIUM		WILD GERANIUM		ELECTROSTATIC		POOR					
				GERANIUM		WILD GERANIUM		PNEUMATIC		POOR					
108	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	LATHYRUS		VETCHLING	REMOVE VETCHLING	VIBRATORY	FINE SANDPAPER DECK	GOOD	97	100	100		THE VIBRATOR AND THE VELVET ROLLS PERFORMED VERY WELL. ALTHOUGH THE VELVET ROLLS HAD SOMEWHAT HIGHER CROP LOSS, ADDITIONAL CLOVER COULD BE RECLAIMED BY RERUNNING THE REJECT FRACTION.
				LATHYRUS		VETCHLING		VELVET ROLL	240 ROLL SPEED, 7 DEG	GOOD	97	100	100		
				LATHYRUS		VETCHLING		MAGNETIC		POOR					
				LATHYRUS		VETCHLING		SPIRAL		POOR					
				LATHYRUS		VETCHLING		ELECTROSTATIC		POOR					
				LATHYRUS		VETCHLING		DRAPER	CANVAS BELT	POOR					
				LATHYRUS		VETCHLING		AIR-SCREEN	1/14 SCREEN	POOR					
43	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	VICIA		VETCH	REMOVE VETCH.	DRAPER	PLASTIC BELT	GOOD					NEARLY ALL VETCH WAS REMOVED FROM THE CLOVER WITH THE DRAPER.

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147	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	VICIA	HIRSUTA	TINY VETCH	REMOVE TINY VETCH	ELECTROSTATIC		FAIR	54		95		A REASONABLY CLEAN CLOVER LOT COULD NOT BE OBTAINED. BEST RESULTS WERE A 40% RECOVERY WITH THE ELECTROSTATIC WITH 5% VETCH AND AN 80% RECOVERY WITH SCREENS WITH 15% VETCH.
				VICIA	HIRSUTA	TINY VETCH		SCREEN	2X12	FAIR	54		85		
				VICIA	HIRSUTA	TINY VETCH		SPIRAL		POOR					
				VICIA	HIRSUTA	TINY VETCH		DRAPER	CANVAS BELT	POOR					
				VICIA	HIRSUTA	TINY VETCH		PNEUMATIC		POOR					
				VICIA	HIRSUTA	TINY VETCH		INDENT DISC		POOR					
				VICIA	HIRSUTA	TINY VETCH		INDENT CYLINDER		POOR					
401	TRIFOLIUM	INCARNATUM	CRIMSON CLOVER	VICIA	SATIVA AUGUSTIFOLIA	NARROWLEAF VETCH	REMOVE NARROWLEAF VETCH.	DRAPER		POOR					NO SUCCESS WITH THIS SAMPLE.
				VICIA	SATIVA AUGUSTIFOLIA	NARROWLEAF VETCH		VIBRATORY		POOR					
				VICIA	SATIVA AUGUSTIFOLIA	NARROWLEAF VETCH		SPIRAL		POOR					
				VICIA	SATIVA AUGUSTIFOLIA	NARROWLEAF VETCH		OTHER	BOUNCE PLATE	POOR					
100	TRIFOLIUM	PRATENSE	RED CLOVER	AMARANTHUS		PIGWEED	REMOVE PIGWEED	INDENT CYLINDER	16X26GA CYLINDER	GOOD	94				BEST RESULTS WITH THE INDENT CYLINDER WHICH RECOVERED 86% OF THE CLOVER WITH 31 PIGWEED/LB.
				AMARANTHUS		PIGWEED		SCREENS	VARIOUS SIZES	POOR					
				AMARANTHUS		PIGWEED		VIBRATORY	FINE SANDPAPER	FAIR	94	92	100		
				AMARANTHUS		PIGWEED		PNEUMATIC		POOR					
				AMARANTHUS		PIGWEED		DRAPER		POOR					
				AMARANTHUS		PIGWEED		VELVET ROLL		POOR					
				AMARANTHUS		PIGWEED		ELECTROSTATIC		POOR					
1218	TRIFOLIUM	PRATENSE	RED CLOVER	AMARANTHUS		PIGWEED								INFORMATION WAS PROVIDED BASED ON PS #28 AND #100.	
673	TRIFOLIUM	PRATENSE	WHITE CLOVER	ANTHEMIS	COTULA	DOGFENNEL	REMOVE DOGFENNEL	FRICTION	VINYL SUEDE BELT, VINYL BAR	GOOD					BOTH FRICTION AND MAGNETIC SEPARATORS WERE EFFECTIVE AT REMOVING THE DOGFENNEL.
				ANTHEMIS	COTULA	DOGFENNEL		MAGNETIC	#5 IRON POWDER	GOOD					
1074	TRIFOLIUM	PRATENSE	RED CLOVER	FLORETTES		FLORETTES	REMOVE BUCKHORN, LADYSTHUMB,FLORETTES AND INERT.	SCREEN	SEQ.#6 ROUND-HOLE					THIS SAMPLE WAS SUBMITTED TO DETERMINE THE SHRINKAGE FROM A PROCESSING SEQUENCE SIMILAR TO THAT USED BY T	SHRINKAGE APPEARED TO BE GREATER THAN FOR THE SEQUENCE USED BY THE SUBMITTER. PURITY APPEARED TO BE ACCEPTABLE ALTHOUGH NO OFFICIAL ANALYSIS WAS MADE. FINE TUNING OF THIS SEQUENCE AND RERUNNING OF CERTAIN FRACTIONS MIGHT REDUCE LOSS.
								SCREENS	SEQ.						
								GRAVITY	SEQ.14X14 WIRE OVER 20X20 WIRE						
								SCREENS	SEQ.6X16 WIRE OVER 6X21 WIRE						
				INERT		INERT		VELVET ROLL	SEQ.						
				PLANTAGO	LANCEOLATA	BUCKHORN		DRAPER	SEQ.						
				POLYGONUM	PERSICARIA	LADYSTHUMB			SEQ.						
690	TRIFOLIUM	PRATENSE	FLORIDA WHITE CLOVER	INERT		INERT	REMOVE DIRT CLODS AND INSECT-DAMAGED MATERIAL	GRAVITY	SEQ. ENDSLOPE=7, AIR=3, BACKSLOPE=2	GOOD					BEST RESULTS WERE OBTAINED WITH THE GRAVITY SEPARATOR FOLLOWED BY THE FRICTION SEPARATOR.
				INERT		INERT		FRICTION	SEQ.VINYL BAR, SUEDE BELT	GOOD					
				INERT		INERT		MAGNETIC		GOOD					
58	TRIFOLIUM	PRATENSE	RED CLOVER	LOLIUM		RYEGRASS	REMOVE RYEGRASS, WEED SEEDS AND INERT MATERIAL.	AIR-SCREEN	SEQ.1/13 OVER 1/18	GOOD				WHILE USING THE CLIPPER, THE FEED HOPPER HAD TO BE HAND STIRRED TO PREVENT BRIDGING OF THE RYEGRASS. ALSO, THE SCREENS TENDED TO CLOG AND HAD TO BE SCRAPED CLEAN.	GOOD RESULTS WERE OBTAINED WITH THE AIR-SCREEN MACHINE. THE FRACTION THROUGH THE BOTTOM SCREEN WAS THEN PUT IN THE BLOWER TO REMOVE LIGHT TRASH.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD	67	90	97		
1	TRIFOLIUM	PRATENSE	DOLLARD RED CLOVER	MELILOTUS		SWEETCLOVER	REMOVE SWEETCLOVER AND ALFALFA.	ELECTROSTATIC	20KV	FAIR	97		100		ALTHOUGH THE PURITY WAS IMPROVED, 99.5% DID NOT MEET REQUIRED PURITY, AND REPEATED RERUNS SHOWED NO FURTHER INCREASE IN REMOVAL OF THE CONTAMINANTS. NO SOLUTION IS APPARENT AT THIS TIME.
								SCREENS		POOR					
								PNEUMATIC		POOR					
								GRAVITY		POOR					
20	TRIFOLIUM	PRATENSE	DOLLARD RED CLOVER	MISC		MISC	REMOVE CHALCID FLY INFESTED RED CLOVER, GRASS, PLANTAIN, LADYSTHUMB AND CHAFF.	SCREEN	SEQ.1/15 ROUND-HOLE	GOOD					THE ABOVE PROCEDURE YIELDED 68LBS (OUT OF AN ORIGINAL 89LBS) OF 99.96% PURE CROP WITH .04% OTHER SEED AND NO INERT MATERIAL.
				MISC		MISC		AIR-SCREEN	SEQ.1/15 OVER 6X24 WIRE	GOOD					
				MISC		MISC		PNEUMATIC	SEQ.OVER 6X24 FRACTION	GOOD			100		
610	TRIFOLIUM	PRATENSE	RED CLOVER	MISC		MISC	REMOVE WEEDS (DOCK, PIGWEED, LAMBSQUARTER, MALLOW, PRICKLY LETTUCE, ETC.).	PNEUMATIC	SEQ. 630 FPM						BEST RESULTS WERE OBTAINED WITH PNEUMATIC SEPARATION FOLLOWED BY SCREENING WITH A FINAL PURITY OF 100% AND A LOSS OF 7%. A SPECIAL INDENT CYLINDER (1/16 X 22 GAGE) LOST ONLY 3% OF THE CROP, BUT WITH 270 WEED SEEDS PER LB LEFT.
				MISC		MISC		SCREEN	SEQ. 6X22 WIRE MESH	GOOD		100	100		

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1045	TRIFOLIUM	PRATENSE	RED CLOVER	MISC.		MISC.	CLEAN SCREENINGS TO RETRIEVE RED CLOVER SEED.	AIR-SCREEN	.062 RD HOLE TOP SCREEN, 6X28 WOVEN-WIRE BOTTOM SCREEN	GOOD					THE AIR SCREEN SEPARATOR WORKED VERY WELL FOR REMOVING LARGE AND SMALL MATERIAL FROM THE SAMPLE TO CONCENTRATE THE CLOVER SEED TO 20% TO 30 % IN THE FINAL FRACTION AS DESIRED.
201	TRIFOLIUM	PRATENSE	RED CLOVER	PHLEUM	PRATENSE	TIMOTHY	REMOVE BUCKHORN AND TIMOTHY	SCREEN	SEQ.1/23 ROUND-HOLE	GOOD					THE 1/23 SCREEN DROPPED THE TIMOTHY AND SMALL BUCKHORN, THEN THE .075"X.03" INDENT LIFTED THE CLOVER FROM THE REMAINING BUCKHORN. ACCORDING TO SEED MEASUREMENTS THE IDEAL INDENT SIZE WOULD BE .078"X.03".
				PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN		INDENT CYLINDER	SEQ.FRACT HELD BY SCREEN, .075"X.03" POCKET	GOOD			99		
28	TRIFOLIUM	PRATENSE	RED CLOVER	PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN	REMOVE BUCKHORN PLANTAIN, PIGWEED, BULL THISTLE, WILD CARROT, CURLY DOCK, SHEEP SORREL AND CHALCID FLY INFESTED CLOVER.	OTHER	SEQ.FANNING MILL: 1/15 PARTIALLY BLOCKED OVER 6X22						NO OVERALL EVALUATION OF TEST RESULTS INDICATED.
				CIRSIUM	VULGARE	BULL THISTLE		PNEUMATIC	SEQ.OVER 6X22 FRACTION						
				AMARANTHUS		PIGWEED		INDENT CYLINDER	SEQ.#4 CYL, UNLIFTED FRACTION	GOOD					
				DAUCUS	CAROTA	WILD CARROT		ELECTROSTATIC	UNLIFTED FRACT FROM PNEUM	GOOD					
640	TRIFOLIUM	PRATENSE	RED CLOVER	PLANTAGO	LANCEOLATA	BUCKHORN PLANTAIN	REMOVE BUCKHORN PLANTAIN	FRICTION		POOR					THE MAGNETIC SEPARATOR REMOVED ALL BUCKHORN PLANTAIN IN THE SAMPLE WITH 8% CROP LOSS.
								MAGNETIC		GOOD		100	100		
354	TRIFOLIUM	PRATENSE	KENLAND RED CLOVER	RUMEX	CRISPUS	CURLY DOCK	REDUCE CURLY DOCK FROM 144/LB TO 45/LB OR LESS.	VELVET ROLL	150 RPM, 15 DEG.	GOOD		100	100		BEST RESULTS WITH THE VELVET ROLLS WITH ALL DOCK REMOVED AND 10% LOSS. THE VIBRATOR AND GRAVITY MACHINE SHOULD ALSO BE ABLE TO MAKE THIS SEPARATION.
				RUMEX	CRISPUS	CURLY DOCK		SCREEN	#5 TRIANGULAR	FAIR		100	100		
361	TRIFOLIUM	PRATENSE	RED CLOVER	RUMEX	CRISPUS	CURLY DOCK	REMOVE CURLY DOCK	SCREENS	1/22X1/2 OVER 1/18"RH	FAIR		50			THE BEST ALTERNATIVE IS SCREENING WITH A 1/22X1/2 SLOT OVER A 1/18 ROUND-HOLE SCREEN. 90% OF THE CLOVER WAS SAVED AND HALF THE DOCK WAS REMOVED.
				RUMEX	CRISPUS	CURLY DOCK		VELVET ROLL		POOR					
				RUMEX	CRISPUS	CURLY DOCK		OTHER	BOUNCE PLATE	POOR		61			
623	TRIFOLIUM	PRATENSE	RED CLOVER	RUMEX		DOCK	REMOVE DOCK	FRICTION	TYGON BAR, IMITATION LEATHER BELT	POOR					THE INCLINED DRAPER AND THE VELVET ROLLS GAVE SATISFACTORY RESULTS FOR THIS SEPARATION.
								VELVET ROLL	225 RPM, 8 DEG,CLEARANCE=2	GOOD					
								OTHER	INCLINED DRAPER, 55 RPM, RUBBER BELT, 23 DEG	GOOD		99			
711	TRIFOLIUM	PRATENSE	WHITE CLOVER	RUMEX	ACETOSELLA	SHEEPSORREL	REMOVE SHEEPSORREL, FATHEN AND FIELD MADDER WITH FRICTION SEPARATOR	FRICTION	8 PASSES, 25 DEG-VINYL BAR, SUEDE BELT,	FAIR		55			T
				CHENOPODIUM	ALBUM	FATHEN									
				SHERARDIA	ARVINSIS	FIELD MADDER									
1182	TRIFOLIUM	PRATENSE	RED CLOVER	RUMEX	SP	RUMEX	REMOVE SHEEP SORREL AND CURLY DOCK	VELVET ROLL	15 DEGREES SLOW ROTATION	GOOD	100		100	SUBMITTER HAD PREVIOUSLY USED A NUMBER 6 INDENT TO REMOVE 90% OF THE RUMEX AFTER SCREENING.	THIS WAS FOR USE AS A PASTURE MIX SO HE NEEDED TO GET BELOW 1800/LB. VELVET ROLL PROBABLY ACHIEVED THIS.
810	TRIFOLIUM	PRATENSE	RED CLOVER	TRIFOLIUM	VESICULOSUM	ARROWLEAF CLOVER	REMOVE ARROWLEAF CLOVER	FRICTION	FELT BAR, NAUGAHYDE BELT	GOOD	95	98	100		FOUR PASSES OF THE SAMPLE ON THE FRICTION SEPARATOR YIELDED A 99.8% PURE PRODUCT. THE 28% CROP LOSS COULD BE REDUCED IF THE THROUGH FRACTION WAS RERUN ON THE FRICTION SEPARATOR.
641	TRIFOLIUM	PRATENSE	RED CLOVER	VARIOUS		VARIOUS	REMOVE BUCKHORN PLANTAIN, RYEGRASS GROATS, ALSIKE CLOVER, BULL THISTLE, DOCK ETC.	FRICTION		POOR					THE SAMPLE CONTAINED SO FEW SEEDS OF SOME OF THE CONTAMINANTS THAT SEPARATION RESULTS WERE NOT RELIABLE.
1161	TRIFOLIUM	PRATENSE	RED CLOVER				CLEAN FIELD RUN RED CLOVER								
125	TRIFOLIUM	REPENS	LADINO CLOVER	AMARANTHUS	RETROFLEXUS	REDROOT PIGWEED	REMOVE PIGWEED	VIBRATORY	MULTI-DECK W/SANDPAPER DECK	GOOD	75			SIMILARITY OF SEED DIMENSIONS RULED OUT SCREEN OR LENGTH SEPARATIONS.	WITH A MULTIPLE DECK VIBRATOR, 48% OF THE MIXTURE WAS RECLAIMED WITH A SMALL AMOUNT OF PIGWEED. RESULTS MIGHT BE IMPROVED WITH A SINGLE DECK VIBRATOR AND A DIFFERENT-TEXTURED DECK.
				AMARANTHUS	RETROFLEXUS	REDROOT PIGWEED		PNEUMATIC		POOR					
				AMARANTHUS	RETROFLEXUS	REDROOT PIGWEED		VELVET ROLL		POOR					
				AMARANTHUS	RETROFLEXUS	REDROOT PIGWEED		DRAPER		POOR					
				AMARANTHUS	RETROFLEXUS	REDROOT PIGWEED		ELECTROSTATIC		POOR					

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288	TRIFOLIUM	REPENS	NEW ZEALAND WHITE CLOVER	AMARANTHUS		PIGWEED	REMOVE PIGWEED	SCREEN	4X26 SLOT	FAIR			100		BEST RESULTS WERE WITH THE VIBRATOR WHICH YIELDED 82% OF THE LOT AT A PURITY OF 99.9%. THE GRAVITY TABLE (BLOCKED) YIELDED 94% AT A 99.7% PURITY.
				AMARANTHUS		PIGWEED		VIBRATORY	SANDPAPER DECK	GOOD			100		
				AMARANTHUS		PIGWEED		GRAVITY	SANDPAPER DECK, NO AIR	GOOD			100		
524	TRIFOLIUM	REPENS	LADINO CLOVER	AMARANTHUS		PIGWEED	REMOVE PIGWEED.	VIBRATORY	600 GRIT PAPER DECK	FAIR				SCREENS, VELVET ROLLS, ELECTROSTATIC AND AIR COLUMN YIELDED POOR RESULTS.	THE PIGWEED, INSTEAD OF BEING SMOOTH AND SHINY LIKE NORMAL, WAS DULL AND GRAINY, LIKE THE
				AMARANTHUS		PIGWEED		VIBRATORY	80, 180 AND 280 GRIT DECKS	POOR					
1164	TRIFOLIUM	REPENS	LADINO CLOVER	ANAGALLIS	ARVENSIS	SCARLET PIMPERNEL	REMOVE WEEDS: WITCH GRASS, SCARLET PIMPERNEL AND OTHERS	SCREEN	6X22 WW	GOOD				THESE WERE TWO BREEDER LOTS OF LADINO CLOVER.	USE SCREENS, GRAVITY AND INDENT CYLINDER TO REMOVE WITCH WEED AND SCARLET PIMPERNEL FROM LADINO CLOVER.
				PANICUM	CAPILLARE	WITCHGRASS		GRAVITY	SEQ. WITH INDENT CYLINDER	GOOD					
				PANICUM	CAPILLARE	WITCHGRASS		INDENT CYLINDER	SEQ WITH SCREEN 1.35 MM	GOOD					
318	TRIFOLIUM	REPENS	WHITE CLOVER	CUSCUTA		DODDER	REMOVE DODDER AND REDUCE LAMBSQUARTER AND PIGWEED.	VIBRATORY	SEQ.30-DECK, 3 PASSES	GOOD					THE VIBRATOR REMOVED 100% OF THE DODDER. THE VIBRATOR AND THE VELVET ROLLS REMOVED 66% OF THE LAMBSQUARTER AND 90% OF THE PIGWEED. LOSS WAS 21%.
				AMARANTHUS		PIGWEED		VIBRATORY	SEQ.30-DECK, 3 PASSES	GOOD					
				CHENOPODIUM	ALBUM	LAMBSQUARTER		VELVET ROLL	SEQ.	FAIR					
114	TRIFOLIUM	REPENS	WHITE CLOVER	CYNODON		BERMUDA GRASS	REMOVE HULLED BERMUDA GRASS.	VIBRATORY	FINE SANDPAPER	GOOD	98	100	100		BEST RESULTS WITH THE DRAPER, 26X26 SCREEN, AND VIBRATOR SEPARATOR. ALL YIELDED 100% PURE SAMPLES WITH CROP LOSSES OF LESS THAN 4% IN ALL CASES.
				CYNODON	DACTYLON	BERMUDA GRASS		SCREEN	26X26 W/DAMS	GOOD	98	100	100		
				CYNODON	DACTYLON	BERMUDA GRASS		PNEUMATIC		FAIR	98				
				CYNODON	DACTYLON	BERMUDA GRASS		ELECTROSTATIC	14KV	FAIR	98				
				CYNODON	DACTYLON	BERMUDA GRASS		DRAPER	PLASTIC BELT	GOOD	98	100	100		
314	TRIFOLIUM	REPENS	DUTCH WHITE CLOVER	ERUCASTRUM	GALLICUM	DOGMUSTARD	REMOVE WILD TURNIP(428/LB) AND DOGMUSTARD(214/LB). 642/LB TOTAL WEED COUNT.	VIBRATORY	SANDPAPER DECK	GOOD		83		IN ALL TRIALS ABOVE, BOTH WEEDS ARE CONSIDERED TOGETHER IN THE RESULTS.	THE VIBRATOR DID THE BEST, YIELDING 93% OF THE ORIGINAL MATERIAL WITH 108WEED SEEDS/LB. THE ELECTROSTATIC SEPARATOR AND 1/25 ROUND HOLE SCREEN YIELDED 84% WITH 218/LB AND 96% WITH 283/LB RESPECTIVELY.
				BRASSICA		WILD TURNIP		SCREEN	25-Jan	FAIR		56			
								ELECTROSTATIC		FAIR		66			
								SPIRAL		POOR					
								PNEUMATIC		POOR					
								DRAPER		POOR					
1044	TRIFOLIUM	REPENS	WHITE CLOVER	INERT		INERT	REMOVE INERT MATERIAL: SOIL PARTICLES	OTHER	SEQ.SQUEEZE ROLLS: ONE HARDWOOD AND ONE SOFT RUBBER					THIS PROBLEM SAMPLE FORMERLY #0796B. RELATED SAMPLE IS #796 (FORMERLY #796A).	SOIL PARTICLES MAY BE PARTIALL
				INERT		INERT		SCREEN	SEQ. .27 ROUND HOLE	GOOD	95	96	100		
				INERT		INERT		MAGNETIC	FERROMAGNETIC LIQUID SOLN, 2 PASSES	GOOD	95	94	100		
				INERT		INERT		VELVET ROLL		FAIR	95	90	99		
27	TRIFOLIUM	REPENS	LADINO CLOVER	LOTUS	ULIGINOSUS	BIG TREFOIL	REMOVE BIG TREFOIL, BIRDSFOOT TREFOIL AND PIGWEED.	GRAVITY		POOR					THERE IS NO SOLUTION TO THIS PROBLEM AT THIS TIME. ONLY SMALL IMPROVEMENTS IN PURITY WERE OBSERVED WITH LOSS OF CROP.
				LOTUS	CORNICULATUS	BIRDSFOOT TREFOIL		PNEUMATIC		POOR					
								INDENT DISC		POOR					
								ELECTROSTATIC		POOR					
								INDENT CYLINDER		POOR					
								VELVET ROLL		POOR					
				AMARANTHUS		PIGWEED		SCREENS		POOR					
332	TRIFOLIUM	REPENS	WHITE CLOVER	LYCHNIS	ALBA	COCKLE	REMOVE GERANIUM AND COCKLE.	VIBRATORY	SANDPAPER DECK	FAIR				A 1/23 ROUND-HOLE SCREEN DROPPED MUCH WEED WITH 10% OF THE CROP. THE ELECTROSTATIC SEPARATOR AND INDENT CYLINDER WERE UNSUCCESSFUL.	THE VIBRATOR RECOVERED 60% OF THE CLOVER WITH ONLY A SMALL AMOUNT OF GERANIUM AND COCKLE.
				PELARGONIUM		GERANIUM		VIBRATORY	SANDPAPER DECK	FAIR					
264	TRIFOLIUM	REPENS	WHITE CLOVER	PHALARIS	CANARIENSIS	CANARYGRASS	REMOVE CANARYGRASS	INDENT CYLINDER	1/17X26 GA CYLINDER	GOOD		100	100		A 1/17x26 ga indent cylinder produces almost ideal results: all contaminant removed with .5% crop loss.
				PHALARIS	CANARIENSIS	CANARYGRASS		VIBRATORY		FAIR					
69	TRIFOLIUM	REPENS	WHITE CLOVER	RUMEX		SORREL	REMOVE SORREL AND WHITE-TIP CLOVER.	VIBRATORY	FINE TEXTURED DECK			100			A 24X24 SCREEN DROPPED MOST OF THE WHITETIP CLOVER WHILE RETAINING 98.7% OF THE LOT. THE VIBRATOR, WITH FINE TEXTURED DECK, RECLAIMED 96% OF THE LOT FREE OF RUMEX. WITH A FINE SAND-PAPER DECK, 70% WAS RECLAIMED WITH 75% OF THE CLOVER REMOVED.
				RUMEX		SORREL		VELVET ROLL		POOR					
				TRIFOLIUM	VARIEGATUM	WHITETIP CLOVER		SCREEN	24X24	FAIR					
160	TRIFOLIUM	REPENS	WHITE CLOVER	RUMEX		SHEEP SORREL	REMOVE SHEEP SORREL	PNEUMATIC		FAIR	85	100	100		THE PNEUMATIC SEPARATOR MADE THE BEST SEPARATION RECLAIMING ABOUT 60% OF THE LOT WITH LOW SORREL CONTENT.
				RUMEX	ACETOSELLA	SHEEP SORREL		ELECTROSTATIC		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		VIBRATORY		POOR					

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168	TRIFOLIUM	REPENS	WHITE CLOVER	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE SHEEP SORREL	PNEUMATIC		FAIR	89				THE PNEUMATIC SEPARATOR DID THE BEST, RECLAIMING 46% OF THE LOT WITH 420 SORREL/LB.
				RUMEX	ACETOSELLA	SHEEP SORREL		MAGNETIC		POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		ELECTROSTATIC	20KV,HOR=1-1/2,VER=11-1/4,ROT=2.7	POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		OTHER	CATAPULT	POOR					
				RUMEX	ACETOSELLA	SHEEP SORREL		VIBRATORY	VARIOUS DECKS	POOR					
200	TRIFOLIUM	REPENS	WHITE CLOVER	RUMEX	ACETOSELLA	SHEEPSORREL	REMOVE SHEEP SORREL	SCREEN	SEQ.6X24 WIRE MESH, SCALPING						BY FAR THE BEST SEPARATION WAS OBTAINED BY PUTTING THE DROPPED FRACTION FROM THE 6X24 WIRE MESH SCREEN THROUGH THE PNEUMATIC SEPARATOR. 50% OF THE ORIGINAL LOT WAS RECLAIMED WITH A PURITY OF 133 SORREL/LB.
				RUMEX	ACETOSELLA	SHEEPSORREL		PNEUMATIC	SEQ.	GOOD					
				RUMEX	ACETOSELLA	SHEEPSORREL		SCREENS		POOR					
				RUMEX	ACETOSELLA	SHEEPSORREL		ELECTROSTATIC		POOR					
				RUMEX	ACETOSELLA	SHEEPSORREL		VELVET ROLL		POOR					
				RUMEX	ACETOSELLA	SHEEPSORREL		GRAVITY		POOR					
323	TRIFOLIUM	REPENS	WHITE CLOVER	RUMEX	ACETOSELLA	SHEEPSORREL	REMOVE SHEEPSORREL	SCREENS	SEQ.6X25 OVER .038"	GOOD				THE 6X25 HELD MANY SORREL IN HULL AND SKINNED. THE .038" DROPPED MANY SKINNED SORREL. THE MAGNETIC SEPARATOR REMOVED STEMS, SKINNED SEEDS, SMALL SORREL AND BROKEN CLOVER.	YIELDS WERE NOT DETERMINED, BUT WERE IMPRESSIVE.
				RUMEX	ACETOSELLA	SHEEPSORREL		MAGNETIC	SEQ.OIL AND WATER	GOOD					
376	TRIFOLIUM	REPENS	NEW ZEALAND WHITE CLOVER	RUMEX	ACETOSELLA	SHEEPSORREL	REMOVE SHEEPSORREL	SCREEN	4X20 WIRE MESH	GOOD					A 4X20 WIRE MESH SCREEN HOLDS THE SORREL AND DROPS THE CLOVER.
461	TRIFOLIUM	REPENS	WHITE CLOVER	RUMEX	ACETOSELLA	SHEEPSORREL	REMOVE SHEEP SORREL.	SCREEN	6X25 SLOT	FAIR				INITIAL PURITY WAS 2800 SORREL/LB. FINAL PURITIES IN THE ABOVE TRIALS WERE 550/LB, 286/LB, 0/LB, 550/LB, 1170/LB, AND 150/LB, RESPECTIVELY.	RECOMMENDED PROCEDURE IS TO USE PNEUMATIC SEPARATOR AND A 1/24 ROUND-HOLE SCREEN. THIS YIELDED 67% WITH PURITY OF 150 SORREL/LB.
				RUMEX	ACETOSELLA	SHEEPSORREL		SCREEN	.038" ROUND HOLE	FAIR					
				RUMEX	ACETOSELLA	SHEEPSORREL		PNEUMATIC		FAIR		100	100		
				RUMEX	ACETOSELLA	SHEEPSORREL		ELECTROSTATIC		FAIR					
				RUMEX	ACETOSELLA	SHEEPSORREL		VELVET ROLL		FAIR					
				RUMEX	ACETOSELLA	SHEEPSORREL		MAGNETIC		POOR					
				RUMEX	ACETOSELLA	SHEEPSORREL		GRAVITY		POOR					
				RUMEX	ACETOSELLA	SHEEPSORREL		PNEUMATIC		FAIR					
				RUMEX	ACETOSELLA	SHEEPSORREL		SCREEN		FAIR					
592	TRIFOLIUM	REPENS	WHITE CLOVER	RUMEX	ACETOSELLA	SHEEP SORREL	REMOVE MISCELLANEOUS CONTAMINANTS: SHEEP SORREL, DOGFENNEL, LAMBSQUARTER, DIRT, STICKS, GRASS SEED, ETC.	FRICTION		GOOD		90			THE FRICTION SEPARATOR REMOVED 90% OF THE SHEEP SORREL WITH VERY LITTLE CROP LOSS.
181	TRIFOLIUM	REPENS	DUTCH WHITE CLOVER	SILENE		CATCHFLY	REMOVE CATCHFLY	INDENT CYLINDER	.049"DIAMX.025"DEEP POCKETS	FAIR			93	INDENT TEST CONSISTED OF A SAMPLE OF 20 CLOVER SEEDS AND AN UNKNOWN QUANTITY OF CATCHFLY SEEDS.	THE VELVET ROLL GAVE THE BEST RESULTS. THE INDENT CYLINDER ALSO DID WELL, BUT HAD A HIGHER CROP LOSS.
				SILENE		CATCHFLY		VELVET ROLL	104RPM, 8.75DEG,RERUN UPPER FRACTIONS TWICE	GOOD	85	98	100		
				SILENE		CATCHFLY		VIBRATORY		POOR					
				SILENE		CATCHFLY		PNEUMATIC		POOR					
				SILENE		CATCHFLY		DRAPER		POOR					
				SILENE		CATCHFLY		MAGNETIC		POOR					
				SILENE		CATCHFLY		ELECTROSTATIC		POOR					
629	TRIFOLIUM	REPENS	WHITE CLOVER	TRIFOLIUM		HOP CLOVER	REMOVE HOP CLOVER	SCREEN	.038 ROUND-HOLE	GOOD		100	100		A .038" ROUND-HOLE SCREEN REMOVED ALL THE HOP CLOVER FROM THE SAMPLE.
955	TRIFOLIUM	REPENS	WHITE CLOVER	TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER	REMOVE ALSIKE CLOVER	SCREENS		POOR				MANY METHODS WERE TRIED TO REDUCE THE QUANTITY OF ALSIKE CLOVER. NONE WERE FOUND TO BE EFFECTIVE.	ALSIKE CLOVER CANNOT BE REMOVED COMPLETELY FROM WHITE CLOVER USING CONVENTIONAL MACHINES.
				TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER		INDENT CYLINDER		POOR					
				TRIFOLIUM	HYBRIDUM	ALSIKE CLOVER		COLOR SORTER		POOR					
701	TRIFOLIUM	SUBTERRANEUM	SUBCLOVER	INERT		INERT	REMOVE INERT MATERIAL (DIRT CLODS)	VELVET ROLL	11 DEG ANGLE, 220 RPM	GOOD	89	99	100	OTHER MACHINES SHOWED LIMITED TENDENCIES TO MAKE THIS SEPARATION.	THE VELVET ROLL YIELDED THE BEST RESULTS WITH A FINAL PURITY OF 99.9% AND A LOSS OF 6%.
				INERT		INERT		FRICTION	SUEDE BELT, 4 PASSES	GOOD	89		100		
				INERT		INERT		MAGNETIC		FAIR		90			
748	TRIFOLIUM	SUBTERRANEUM	SUBTERRANEAN CLOVER	TRIFOLIUM	SUBTERRANEUM	SUBTERRANEAN CLOVER	REMOVE CRACKED AND LOW-GERMINATION SEED.	GRAVITY	SEQ.						GERMINATION WAS IMPROVED BY 19% WITH 91.8% OF GERMINABLE SEED BEING RETURNED.
				TRIFOLIRM	SUBTERRANEUM	SUBTERRANEAN CLOVER		VELVET ROLL	SEQ.	GOOD		92	99		
374	TRIFOLIUM	VESICULOSUM	ARROWLEAF CLOVER	CUSCUTA		DODDER	REMOVE DODDER.	MAGNETIC		GOOD		100	100	SEED MEASUREMENTS INDICATE USING A 1/21" ROUND-HOLE SCREEN FOR WIDTH SEPARATION SHOULD DROP 72% OF THE DODDER AND 12% OF THE CLOVER. ALSO, A SPECIAL INDENT CYLINDER SHOULD LIFT 76% OF THE DODDER AND REJECT THE CROP.	THE MAGNETIC SEPARATOR DID THE BEST, REDUCING DODDER FROM 1300/LB TO 0 WITH 9% SHRINKAGE. OTHER POSSIBILITIES ARE WIDTH SEPARATION USING A 1/21" ROUND-HOLE SCREEN OR AN INDENT.
				CUSCUTA		DODDER		VELVET ROLL		POOR					
				CUSCUTA		DODDER		VIBRATORY		POOR					

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				CUSCUTA		DODDER		PNEUMATIC		POOR					
386	TRIFOLIUM	VESICULOSUM	ARROWLEAF CLOVER	CUSCUTA		DODDER	REMOVE DODDER								MEASUREMENTS ONLY.
615	TRIFOLIUM	VESICULOSUM	ARROWLEAF CLOVER	CUSCUTA		DODDER	REMOVE DODDER	MAGNETIC		GOOD			100	THE FRICTION SEPARATOR SHOWED SOME SELECTIVITY, BUT NOT ENOUGH TO OFFER MUCH PROMISE.	THE MAGNETIC SEPARATOR IS THE MOST EFFECTIVE SEPARATOR FOR THIS PROBLEM.
630	TRIFOLIUM	VESICULOSUM	ARROWLEAF CLOVER	CUSCUTA		DODDER	REMOVE DODDER	PNEUMATIC	SEQ.					THE FRICTION SEPARATOR, VELVET ROLL, DRAPER, SPIRAL, PNEUMATIC AND MAGNETIC SEPARATORS WERE UNSUCCESSFUL.	A SEQUENCE OF PNEUMATIC FOLLOWED BY MAGNETIC SEPARATORS GAVE GOOD RESULTS.
				CUSCUTA		DODDER		MAGNETIC	SEQ.	GOOD	79	100			
607	TRIFOLIUM	VESICULOSUM	ARROWLEAF CLOVER	DIRT		DIRT	SUBMITTER REQUESTED AIR-SCREEN MACHINE SCREEN SIZES TO CLEAN ARROWLEAF CLOVER LOT.								SEVERAL RECOMMENDATIONS WERE MADE TO THE SUBMITTER BASED ON SCREEN COMPANY RECOMMENDATIONS.
452	TRIFOLIUM	VESICULOSUM	ARROWLEAF CLOVER	TRIFOLIUM	PRATENSE	RED CLOVER	REMOVE RED CLOVER.	INDENT CYLINDER	1/18X24 GA CYLINDER	GOOD			100		THE VELVET ROLL AND INDENT CYLINDER PERFORMED VERY WELL YIELDING PURITIES OF 99.8% WITH LESS THAN 10% LOSS.
				TRIFOLIUM	PRATENSE	RED CLOVER		PNEUMATIC		FAIR			100		
				TRIFOLIUM	PRATENSE	RED CLOVER		VELVET ROLL	200 RPM, 9 DEG INCLINE	GOOD			100		
				TRIFLOIUM	PRATENSE	RED CLOVER		SCREENS	4X20 WIRE OR 1/18	POOR					
850	TRIFOLIUM		ALFALFA	INERT		INERT	REMOVE INERT MATERIAL AND MISC. WEED SEEDS.	AIR-SCREEN	SEQ. 1/16 RD. TOP, 1/21 RD. BOTTOM	GOOD					THE FINAL PRODUCT AFTER THE ABOVE SEQUENCE WAS ABOUT 95% ALFALFA AND 3% MISCELLANEOUS WEED SEED.
				INERT		INERT		VELVET ROLL	SEQ.						
				INERT		INERT		INDENT CYLINDER	SEQ.	GOOD			95		
379	TRIFOLIUM		CLOVER	RUMEX		SORREL	REMOVE SORREL								MEASUREMENTS ONLY.
1256	TRIFOLIUM		CLOVER	TRIFOLIUM		UNTHRESHED SEED	DETERMINE THRESHING SCREEN SIZES FOR CLOVER, LOTUS, OATGRASS, TIMOTHY AND OTHERS	SCARIFIER	7X7WW, 10X10WW					THESE ARE RECOMMENDED MANTLE SIZES BASED ON SEEDS OF THESE SPECIES FROM OUR HERBARIUM. SIZES WILL VARY FOR DIFFERENT VARIETIES. NO SAMPLE WAS OBTAINED FOR ACUTAL TESTS.	
				LOTUS		UNTHRESHED SEED		SCARIFIER	10X10						
				ARRHENATHERUM		UNTHRESHED SEED		SCARIFIER	7X7WW, 10X10WW						
				PHLEUM		UNTHRESHED SEED		SCARIFIER	14X14WW, 20X20WW						
912	TRIFOLIUM		SHAMROCK CLOVER			CHICKWEED	REMOVE CHICKWEED	VELVET ROLL	3 PASSES, 100RPM, 12 DEGREES		91		100		THREE PASSES ON THE VELVET ROLL PRODUCED A 100% PURE SAMPLE OF SHAMROCK CLOVER WITH 29.4% LOSS.
1172	TRITICUM	AESTIVUM	WHEAT	INERT		ROCKS	REMOVE SOIL AND ROCKS	AIR-SCREEN	7 1/4 /64THS X 3/4" SLOT TOP SCREEN	FAIR	90	60	96	THIS WAS A LOT OF SEED SPILLED IN A TRAIN DERAILMENT AND CONTAMINATED DURING RECOVERY. THE PROCESSOR DECIDED TO USE THE AIR SCREEN MACHINE IN A SCALP SIFT ONLY CONFIGURATION AND SPLIT THE FLOW.	THIS MATERIAL CAN BE CLEANED BY CONVENTIONAL MEANS, THOUGH IN SOME STEPS THE CAPACITY MAY BE LESS THAN USUAL.
				INERT		ROCKS		AIR-SCREEN	1/12" X 1/2" SLOT BOTTOM SCREEN	FAIR	96	1	96		
				INERT		ROCKS		AIR-SCREEN	FINAL AIR TO LIFT ABOUT 1/3 OF THE MATERIAL	GOOD	96	90	99		
				INERT		ROCKS		GRAVITY	SLOW WITH LOW BACKSLOPE	GOOD	96	90	99		
				INERT		ROCKS		INDENT CYLINDER	3.75MM	FAIR	99	50	100		
1249	TRITICUM	AESTIVUM	SOFT WHITE WHEAT	TRITICO	SECALE	TRITICALE	REMOVE TRITICALE	INDENT CYLINDER	6MM POCKET	FAIR				THIS MATERIAL WAS 60 SAMPLES OF FOUR VARITIES OF WHEAT FOR A POPULATION DRIFT STUDY. NO LOSS OF CROP WAS ACCEPTABLE AND THE PROCESS USED IS INTENDED TO REDUCE THE HAND PICKING OF TRITICALE.	
740	TRITICUM	AESTIVUM	WHEAT	TRITICUM	AESTIVUM	WHEAT	REMOVE SMALL AND SHRIVELED WHEAT	SCREENS	SEQ. 6 1/2X3/4 SLOTTED SCR.						SCREEN/PNEUMATIC OR SCREEN/FRICTION WILL SEPARATE SHRIVELED WHEAT FROM NORMAL WHEAT WITH GOOD RESULTS.
				TRITICUM	AESTIVUM	WHEAT		PNEUMATIC	ALTERNATIVE 1: HIGH AIR FLOW	GOOD					
				TRITICUM	AESTIVUM	WHEAT		FRICTION	ALTERNATIVE 2: CARPET BELT, SYNTHETIC BAR	GOOD					
1118	TRITICUM	AESTIVUM	STEVENS WHEAT	TRITICUM	AESTIVUM	WHEAT	MAKE SIZE SEPARATIONS THEN DENSITY SEPARATIONS OF STEVENS WHEAT	SCREENS	8X3/4 TOP, 7X3/4 MIDDLE, 5-1/2X3/4 BOTTOM	GOOD				THIS WAS RESEARCH BY DALE WILKINS, USDA-ARS PENDLETON TO DETERMINE IF THERE WERE DIFFERENCES IN THE GROWTH CHARACTERISTICS OF WHEAT SEEDS OF DIFFERENT SIZES AND DENSITIES. RESULTS WILL BE SENT TO US WHEN THEY ARE AVAILABLE.	
				TRITICUM	AESTIVUM	WHEAT		GRAVITY	LAH WITH CLOTH DECK	GOOD					
1243	TRITICUM	AESTIVUM	STEVENS WHEAT	TRITICUM	AESTIVUM	SPROUT DAMAGED WHEAT	REMOVE SPROUT DAMAGED WHEAT AT HARVEST							THIS WAS AN INFORMATION REQUEST FOR METHODS TO REMOV	

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642	TRITICUM		SOFT WHITE WHEAT	AEGILOPS		GOATGRASS	REMOVE GOATGRASS	SCREENS	2 #10 1/2 ROUND-HOLE SCREENS	GOOD		80		MIXTURE WAS NOT TYPICAL BECAUSE IT WAS SCREENINGS WHICH DID NOT CONTAIN THE SMALLER THRESHED GOATGRASS THAT MIGHT BE PRESENT IN THE ORIGINAL MATERIAL.	BECAUSE THE GOATGRASS WAS ALL LONGER THAN THE WHEAT, SCREENING WAS EFFECTIVE. THE INDENT CYLINDER WAS NOT TRIED, BUT SHOULD BE EFFECTIVE IN THIS SEPARATION.
								SCREENS		GOOD		90			
703	TRITICUM		WHEAT	AEGILOPS		GOATGRASS	REMOVE GOATGRASS	AIR-SCREEN	SEQ.#12 RD TOP, 1/13X1/2 BOTT	GOOD	92	98	100	THE SPIRAL, INCLINED DRAPER, FRICTION, VELVET ROLL, BOUNCE PLATE, GRAVITY TABLE AND SCREENS SHOWED VARYING, BUT UNSATISFACTORY RESULTS.	BEST RESULTS WERE OBTAINED WITH THE AIR-SCREEN FOLLOWED BY THE INDENT DISK WITH A FINAL PURITY OF VIRTUALLY 100%.
				AEGILOPS		GOATGRASS		INDENT DISC	SEQ.SIZE "A" DISC	GOOD	100	100	100		
				AEGILOPS		GOATGRASS		PNEUMATIC		FAIR	92	88	99		
966	TRITICUM		WHEAT	AEGILOPS		GOATGRASS	REMOVE GOATGRASS.	INDENT CYLINDER	8MM CYLINDER, 1 PASS	GOOD	99	100	100		A SINGLE PASS ON THE INDENT CYLINDER REMOVED 58% OF THE WHEAT FREE OF GOATGRASS. ADDITIONAL PASSES WOULD INCREASE THE PERCENTAGE OF CROP SAVED.
531	TRITICUM		WHEAT	ALLIUM		GARLIC	REMOVE GARLIC BULBLETS.	SCREENS	SEQ.1	FAIR					NO PROCEDURE COULD CO
				ALLIUM		GARLIC		GRAVITY	SEQ.1	FAIR					
				ALLIUM		GARLIC		SCREENS	SEQ.2	FAIR					
				ALLIUM		GARLIC		VELVET ROLL	SEQ.2	FAIR					
				ALLIUM		GARLIC		PNEUMATIC	SEQ.2	FAIR					
534	TRITICUM		WHEAT	ALLIUM		GARLIC	REMOVE GARLIC BULBLETS.	SCREENS	SEQ.10/64 RD OVER 7/64 RD	GOOD					BEST RESULT WERE OBTAINED WITH THE ABOVE SEQUENCE WHICH SALVAGED 84% OF THE WHEAT WITH TWO BULBLETS PER 1000 GRAMS. OTHER TESTS PROVIDED GREATER YIELDS BUT WITH GREATER GARLIC COUNTS.
				ALLIUM		GARLIC		OTHER	SEQ.SQUEEZE ROLLS	GOOD					
				ALLIUM		GARLIC		PNEUMATIC	SEQ.	GOOD					
535	TRITICUM		WHEAT	ALLIUM		GARLIC	REMOVE GARLIC BULBLETS.	SCREENS	SEQ:10/64 RD OVER 7/64 RD	GOOD					THE ABOVE SEQUENCE YIELDED 90% OF THE WHEAT, FREE OF GARLIC. OTHER TRIALS PROVIDED GREATER WHEAT YIELDS BUT W
				ALLIUM		GARLIC		PNEUMATIC		GOOD					
216	TRITICUM		WINTER WHEAT	AVENA	FATUA	WILD OATS	REMOVE WILD OATS								AN INDENT CYLIND
528	TRITICUM		WHEAT	AVENA	FATUA	WILD OATS	REMOVE WILD OATS.	PNEUMATIC		GOOD				BOUNCE PLATE, VIBRATOR AND ELECTROSTATIC RESULTS WERE NOT GOOD.	THE PNEUMATIC SEPARATOR WAS MOST PROMISING, DROPPING ABOUT 90% OF THE WHEAT WHILE LIFTING NEARLY ALL THE OATS.
				AVENA	FATUA	WILD OATS		DRAPER	RUBBER BELT	FAIR					
439	TRITICUM		WHEAT	CONTAMINANTS		CONTAMINANTS	REMOVE CONTAMINANTS	SCREENS	SEQ1.#10 AND #6-1/2 RH						THE ABOVE SEQUENCES WERE USED AND FRACTIONS SENT TO SUBMITTER. NO RESULTS AVAILABLE.
				CONTAMINANTS		CONTAMINANTS		VIBRATORY	SEQ1.80 GRIT SANDPAPER						
				CONTAMINANTS		CONTAMINANTS		SCREENS	SEQ2.#10, #7, #6-1/2 RH						
				CONTAMINANTS		CONTAMINANTS		SCREEN	SEQ3.#10 RH						
				CONTAMINANTS		CONTAMINANTS		INDENT CYLINDER	SEQ3.#10 CYLINDER						
				CONTAMINANTS		CONTAMINANTS		SCREEN	SEQ4.#10 RH						
				CONTAMINANTS		CONTAMINANTS		PNEUMATIC	SEQ4.PNEUMATIC						
1193	TRITICUM		WHEAT	GALIUM		BEDSTRAW	REMOVE GALIUM	INDENT DISC	V5-1/2 DISC OR V6	GOOD		100		THIS WAS A SAMPLE FORM 400 TON LOT TO BE USED FOR SEED	
503	TRITICUM		WHEAT	HORDEUM	VULGARE	BARLEY	REMOVE BARLEY	PNEUMATIC		FAIR				SCREENS, ELECTROSTATIC AND DRAPER WERE UNSUCCESSFUL.	THE PNEUMATIC SEPARATOR AND INDENT DISC SHOWED PROMISE. INDENT CYLINDERS WERE EITHER TOO BIG OR TOO SMALL FOR THIS SEPARATION.
				HORDEUM	VULGARE	BARLEY		INDENT DISC	A DISC	FAIR					
				HORDEUM	VULGARE	BARLEY		INDENT CYLINDER		POOR					
814	TRITICUM		WHEAT	HORDEUM	VULGARE	BARLEY	REMOVE BARLEY IN THE HULL FROM WHEAT WITH HULL REMOVED.	GRAVITY	AIR=4.5, SPEED=545, ENDSLOPE=4DEG, BACKSLOPE=0DEG, DECK=PERF CU.	GOOD	94	83	99	SUBMITTER REQUESTED THAT BARLEY BE REDUCED TO 2% OR LESS WITH NO MORE THAN 20% CROP LOSS.	THE GRAVITY TABLE WAS MOST EFFECTIVE IN REMOVING BARLEY SEED FROM WHEAT. BARLEY WAS REDUCE TO 1%. CROP LOSS WAS IN EXCESS OF THE SPECIFIED 20% BUT MAY BE REDUCED BY RERUNNING OR ADJUSTING THE GRAVITY TABLE DIVIDER POSITION.
490	TRITICUM		WHEAT	IPOMEA		MORNINGGLORY	REMOVE MORNINGGLORY	INDENT CYLINDER	#8 CYLINDER	GOOD		100	100	VELVET ROLLS, DRAPER, SPIRAL, PNEUMATIC AND VIBRATOR WERE UNSUCCESSFUL.	THE INDENT DISC AND CYLINDER SHOW EXCELLENT RESULTS IN THIS SEPARATION.
				IPOMEA		MORNINGGLORY		INDENT DISC	V-6 DISC	GOOD		90			
				IPOMEA		MORNINGGLORY		SCREEN	6 1/2 /64X3/4	FAIR		80			
77	TRITICUM		WHEAT	LUPINUS		LUPIN	REQUEST WAS TO REMOVE HAIRY AND COMMON VETCH, BUT THE ONLY CONTAMINANTS FOUND WERE LUPINE AND DOGFENNEL HEADS.	AIR-SCREEN	#12 OVER #7 SCREENS	GOOD					A #12 TOP SCREEN AND A #7 BOTTOM SCREEN REMOVED ALL THE LUPINE WITH LESS THAN 1% WHEAT LOSS. BECAUSE THE DOGFENNEL PIECES VARIED IN SIZE, THEY COULD NOT BE REMOVED COMPLETELY BY SCREENING.
				ANTHEMIS	COTULA	DOGFENNEL		AIR-SCREEN	#12 OVER #7 SCREENS	FAIR					
632	TRITICUM		WHEAT	MISC.		MISC	REMOVE WILD OATS AND DIRT CLODS	FRICTION	FIBRE-TRAN BELT, TYGON BAR	GOOD					THE FRICTION SEPARATOR DID A VERY GOOD JOB OF REMOVING THE CONTAMINANTS.

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572	TRITICUM		WHEAT	TERDS		TERDS	REMOVE MOUSE DROPPINGS.	OTHER	SEQ. 1. GRADER, #7 SHELL						BOTH OF THE ABOVE SEQUENCES WORKED WELL, THE FIRST ONE REMOVING ALL MOUSE DROPPINGS, AND THE SECOND ONE LEAVING JUST A TRACE.
				TERDS		TERDS		PNEUMATIC	SEQ. 1.	GOOD		100	100		
				TERDS		TERDS		OTHER	SEQ. 2. CRUSHING ROLLS						
				TERDS		TERDS		PNEUMATIC	SEQ. 2.	GOOD					
683	TRITICUM		DURUM	TRITICUM		SOFT WHITE WHEAT	REMOVE BARLEY AND SOFT WHITE WHEAT	INDENT CYLINDER	#16 CYLINDER	GOOD					LENGTH SEPARATORS EFFECTIVELY REMOVED SOFT WINTER WHEAT FROM THE DURUM WHEAT, BUT NO SATISFACTORY METHOD WAS FOUND TO REMOVE THE BARLEY.
				TRITICUM		SOFT WHITE WHEAT		INDENT DISC	A INDENT DISK	GOOD					
525	TRITICUM		WHEAT				REMOVE WEEVIL-INFESTED KERNELS FROM GOOD KERNELS.	ELECTROSTATIC							ALL FRACTIONS RETURNED TO SUBMITTER FOR X-RAY OR DISSECTION ANALYSIS.
1091	TRITICUM		WHEAT					OTHER	BOUNCE PLATE						
								SCREENS	WRINGER ROLLS						
								PNEUMATIC	SEQ.						
1146	TRUTICUM	SPECIES	WHEAT				USE COLOR SORTER TO DIVIDE INTO FRACTIONS WITH DIFFERENT PROTEIN CONTENT?	BELT THRESHER	SEQ.						
1216	TYPHA	LATIFOLIA	CATTAIL				DETERMINE CODITIONING SEQUENCE	OTHER						THIS MATERIAL IS PART OF THE WETLANDS RESTORATION/CONSTRUCTION RESEARCH BEING CONDUCTED AT OSU. HAND COLLECTED MATERIAL NEEDS THRESHING AND SEPARATING.	
941	VARIOUS	VARIOUS	VARIOUS	VARIOUS		VARIOUS	THRESH SEED SAMPLES ON FILAMENT THRESHER: MARIGOLD, ARCTOTIS, POLYGONELLA AMERICANA.	OTHER	FILAMENT THRESHER						THE SEED SAMPLES WERE THRESHED ON THE FILAMENT THRESHER AND FRACTIONS SENT TO SUBMITTER. NO RESULTS.
584	VARIOUS		VARIOUS	INERT		INERT	REMOVE INERT MATERIAL FROM IMPATIENS, COLEUS, PETUNIA AND SNAPDRAGON SEED LOTS.	VIBRATORY	180 GRIT DECK OR SANDBLASTED DECK	GOOD					COLEUS, PETUNIA AND SNAPDRAGON RESPONDED WELL TO THE VIBRATOR SEPARATOR WITH 180 GRIT DECK OR A SANDBLASTED DECK. THE IMPATIENS DID NOT RESPOND TO THE VIBRATOR, BUT WORKED WELL WITH 6X25 AND 1/23 SCREENS.
				INERT		INERT		SCREENS	6X25 WITH 1/23 ROUND HOLE	GOOD					
603	VARIOUS		VARIOUS				MEASURE 5 SEEDS EACH OF BENTGRASS, KENTUCKY BLUEGRASS AND ANNUAL BLUEGRASS.							SUBMITTER REQUESTED MEASUREMENTS TO HELP FIND METHOD OF SEPARATING THE BLUEGRASS GROATS FROM THE CROP.	SUBMITTER WAS GIVEN COPY OF MEASUREMENT SHEET AND PROPER INDENT CYLINDER SIZE FOR THE LOT.
929	VARIOUS		VARIOUS				WHAT ARE BUSHEL WEIGHTS FOR BENTGRASS, PERENNIAL RYEGRASS, TALL FESCUE, FINE FESCUE, ORCHARDGRASS AND BLUEGRASS.								BUSHEL WEIGHTS: BENTGRASS=50LBS, PERENNIAL RYEGRASS=25, TALL FESCUE=25, FINE FESCUE=19, ORCHARDGRASS=14, BLUEGRASS=22.
1203	VARIOUS		ALYSSUM DAHLIA LAVENDER LOBELIA STATICE SOTCKS VERBENA											REQUEST WAS FOR INFORMATION CONCERNING CONDITIONING OF THE ALYSSUM DAHLIA LAVENDER LOBELIA STATICE STOCKS VERBENIA. A REPORT WILL BE PRINTED AND SENT AND A VISIT MAY BE SCHEDULED.	
1238	VARIOUS		NATIVE TREE AND SHRUB BERRIES				REMOVE SEED FROM THE BERRIES OF VARIOUS TREES AND SHRUBS							THIS WAS A REQUEST FOR INFORMATION ON EQUIPMENT FOR CONDITIONING SPECIES OF NATIVE SHRUB AND TREES WITH BERRIES AS SEED UNITS. INFORMATION WAS SENT CONCERNING NURSERY EQUIPMENT INCLUDING THE DYBVIG DEPULPER. A MANUFACTURERS LIST WAS ALSO SENT.	
651	VERBENA		VERBENA	INERT		INERT	REMOVE PIGWEED, MELBA, NIGHTSHADE, STEMS	SCREENS	SEQ.1/24X1/2 OVER .038 RD-HOLE					NO NIGHTSHADE WAS FOUND IN SAMPLE AND "MELBA" WAS NOT RECOGNIZED BY THE SEED TESTING LAB.	THE ABOVE SEQUENCE YIELDED A 93% PURE PRODUCT WITH 10% LOSS.
								PNEUMATIC	SEQ.						
								INDENT CYLINDER	SEQ. #8 CYLINDER						
								SCREEN	SEQ. 5 1/2 ROUND-HOLE	GOOD			93		
196	VERI	DIRTII	SOIL	STRIGA	ASIATICA	WITCHWEED	REMOVE WITCHWEED.	ELECTROSTATIC	1950V, PINNING POSITION	POOR		80			A SATISFACTORY SEPARATION COUL
				STRIGA	ASIATICA	WITCHWEED		SCREENS	60X60 OVER 150 MESH			100	100		
1103	VERNONIA	GALAMENSIS	VERNONIA	VERNONIA	GALAMENSIS	VERNONIA	DELINT							VERNONIA IS UNDER CONSIDERATION	

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1130	VERNONIA	GALAMENSIS	VERNONIA	VERNONIA	GALAMENSIS	UNTHRESHED VERNONIA	THRESH AND CLEAN. REMOVE PAPPUS HAIRS AND FLOWER HEADS FROM OIL BEARING SEED FOR REPLANTING.	SCARIFIER	LAH						
				VERNONIA	GALAMENSIS	UNTHRESHED VERNONIA		SCARIFIER	LAH						
1187	VERNONIA	GALEMENSIS	VERNONIA	VERNONIA	GALAMENSIS	FIELD RUN VERNONIA	DEBEARD AND CLEAN	SCARIFIER	SEQ. LAH STD.BRISTLE, #7 MANTLE	GOOD				THIS WAS UNCLEANED MATERIAL FROM COSTA RICA. 36% OF THE ORIGIANL MATERIAL WAS RETURNED IN THE SEED FRACTION.	BRUSH DEBEARDER AND AIR-SCREEN MACHINE WORK WELL TO THRESH AND CLEAN FIELD RUN VERNONIA.
				VERNONIA	GALAMENSIS	FIELD RUN VERNONIA		AIR-SCREEN	#16RH TOP, 4X26WW BOTTOM, AIR	GOOD					
1127	VERNONIA		VERNONIA	VERNONIA		UNTHRESHED VERNONIA	THRESH AND SEPARATE VERNONIA SEEDS								
729	VICIA	SATIVA	COMMON VETCH	MISCELLANEOUS		MISCELLANEOUS	REMOVE IMPURITIES: HAIRY VETCH, TINY VETCH, WILD OATS, WHEAT, WILD MUSTARD, WILD TURNIP, MALLOW, WILD RADISH, MAYWEED, INERT MATERIALS	AIR-SCREEN	SEQUENCE 1ST RUN: #12 AND #9 ROUND HOLE SCREENS					TESTING WITH 6X6 ESM PNEUMATIC SEPARATOR ALSO YIELDED ENCOURAGING RESULTS.	AIR SCREEN YIELDED GOOD SEPARATION. PNEUMATIC FOLLOWED BY SCREENING WILL ALSO YIELD GOOD SEPARATION.
				MISCELLANEOUS		MISCELLANEOUS		AIR-SCREEN	SEQUENCE 2ND RUN: #12 ROUND HOLE AND 7/64X3/4 SLOTTED HOLE SCREENS	GOOD			100		
63	VICIA	SATIVA	COMMON VETCH	VICIA	SATIVA	BROKEN VETCH	REMOVE BROKEN VETCH AND OATS.	DRAPER	17.5 DEG INCLINE, 24FPM	GOOD	97	85	100		99% OF THE ORIGINAL SAMPLE OF VETCH WAS RECLAIMED ON THE DRAPER WITH A PURITY OF 99.57%. ALL OF THE OATS WERE REMOVED.
62	VICIA	VILLOSA	HAIRY VETCH	ALLIUM		GARLIC	REMOVE GARLIC, MISC WEED SEEDS, INERT MATERIAL AND WEEVIL EATEN VETCH (APPROXIMATELY 40% OF VETCH IS WEEVIL EATEN).	AIR-SCREEN	#11 OVER #7 SCREEN	GOOD	96	75	99		92% OF THE ORIGINAL SAMPLE WAS RECOVERED
342	VICIA	VILLOSA	HAIRY VETCH	PISUM	SATIVUM	WINTER PEAS	REMOVE WILD WINTER PEAS FROM HAIRY VETCH. PURITY MUST BE 95% OR BETTER.	VELVET ROLL	660 RPM	GOOD			96		BOTH THE MAGNETIC SEPARATOR AND THE VELVET ROLL EXCEDED THE DESIRED 95% PURITY.
				PISUM	SATIVUM	WINTER PEAS		MAGNETIC		GOOD			97		
				PISUM	SATIVUM	WINTER PEAS		ELECTROSTATIC		POOR					
				PISUM	SATIVUM	WINTER PEAS		PNEUMATIC		POOR					
				PISUM	SATIVUM	WINTER PEAS		DRAPER		POOR					
				PISUM	SATIVUM	WINTER PEAS		VIBRATORY		POOR					
				PISUM	SATIVUM	WINTER PEAS		OTHER	RESILIENCE	POOR					
24	VICIA	VILLOSA	HAIRY VETCH	VICIA	SATIVA	COMMON VETCH	REMOVE COMMON VETCH, WHEAT, WILD GARLIC, CORNCOCKLE AND LUPINE.	AIR-SCREEN	SEQ.#10 ROUND OVER #7 ROUND	GOOD					THE AIR-SCREEN/SPIRAL/DRAPER SEQUENCE CAN MAKE THIS SEPARATION.
				TRITICUM		WHEAT		SPIRAL	SEQ.OVER #7 FRACTION	GOOD					
				ALLIUM	VINEALE	WILD GARLIC		DRAPER	SEQ.FAST CHUTE FRACTION	GOOD					
1254	VICIA	VILLOSA	HAIRY VETCH				REDUCE HARDSEEDEDNESS FOR USE IN COVER CROP IN WHEAT								
1242	VINCA	TROPICANA ROSE	VINCA	INERT			TEST VIBRATOR SEPARATOR FOR REMOVAL OF INERT AND SMALL SEED	VIBRATORY	POLISHED METAL DECK	GOOD		90		THE VIBRATOR SEPARATOR WITH A POLISHED METAL DECK DID A GOOD JOB OF REMOVING INERT MATERIAL FROM VINCA SEED. SMALL SEED WAS NOT EFF	INERT MATERIAL CAN BE REMOVED FROM VINCA SEED EFFECTIVELY WITH A VIBRATOR SEPA
				INERT		INERT, SMALL SEEDS		SCREENS	1/14"TOP, 20X20 BOTTOM	GOOD					
611	VIOLA	TRICOLOR	PANSY	DIRT		DIRT	REMOVE MUD CLODS	FRICTION		FAIR					TWO PASSES ON THE VIBRATOR SEPARATOR WORKED VERY WELL. THE FRICTION SEPARATOR REMOVED ROUNDED CLODS ONLY AND MIGHT BE USED WITH THE VIBRATOR TO REMOVE ALL THE CLODS.
								VIBRATORY	SEQ. 180 GRIT SANDPAPER	GOOD					
				DIRT		DIRT		VIBRATORY	SEQ. SMOOTH ALUMINUM	GOOD					
542	VIOLA		PANSY	DIRT		DIRT	REMOVE ROCKS, DIRT CLODS, INERT.	VIBRATORY		GOOD					THE VIBRATOR AND VELVET ROLLS PERFORMED VERY WELL. THE SUBMITTER INTENDS TO LOOK INTO BUYING A VIBRATOR SEPARATOR.
				INERT		INERT		VELVET ROLL		GOOD					
				INERT		INERT		PNEUMATIC		FAIR					
				INERT		INERT		SCARIFIER	SANDPAPER DRUM	POOR					
				INERT		INERT		SPIRAL		POOR					
602	XEROPHYLLUM	TENAX	BEARGRASS	INERT		INERT	REMOVE INERT MATERIAL	PNEUMATIC						SIX FRACTIONS WERE OBTAINED OVER AN AIR VELOCITY RANGE OF 170 TO 550 FPM.	ALL FRACTIONS WERE SENT TO SUBMITTER FOR EVALUATION.
351	ZEA	MAYS	SWEET CORN	ZEA	MAYS	CORN	LENGTH-GRADE THE CORN TO REMOVE 10-15% OF THE SMALL CULL ROUNDS AND SHORT SHORTS.	INDENT DISC	SIZE MM DISC	GOOD					THE MM INDENT DISC LIFTED THE PROPER FRACTION OF ROUNDS AND SHORTS.

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565	ZEA	MAYS	SWEET CORN	ZEA	MAYS	FIELD CORN	REMOVE FIELD CORN.	FRICTION	FIBRE-TRAN BELT, FOAM BAR	FAIR					MANY TRIALS WERE MADE WITH OTHER SEPARATORS, BUT ONLY THE FRICTION SEPARATOR SHOWED A MEASURE OF SELECTIVITY. ADDITIONAL TEST WORK WOULD BE NEEDED TO MAKE AN ACCEPTABLE SEPARATION.
568	ZEA	MAYS	SWEET CORN	ZEA	MAYS	FIELD CORN	REMOVE FIELD CORN.	FRICTION		POOR				THE BELT THRESHER WAS USED IN HOPES OF REMOVING THE SHARP POINT ON EACH KERNEL OF FIELD CORN	NO METHOD WAS FOUND TO ADEQUATELY REMOVE THE FIELD CORN FROM SWEET CORN.
				ZEA	MAYS	FIELD CORN		BELT THRESHER		POOR					
775	ZEA	MAYS	SWEET CORN	ZEA	MAYS	FIELD CORN OUTCROSS	REMOVE FIELD CORN OUTCROSS	DRAPER		POOR					THE FRICTION SEPARATOR CAN BE USED FOR THIS SEPARATION, BUT COMPLETE REMOVAL OF THE FIELD CORN IS VERY DIFFICULT. SOME SAMPLES RESPOND VERY DIFFERENTLY FROM OTHERS.
				ZEA	MAYS	FIELD CORN OUTCROSS		FRICTION	BRUSH SEPARATOR AT 30 DEGREES, FOAM SEPARATOR AT 34 DEGREES.	FAIR					
826	ZEA	MAYS	SWEET CORN	ZEA	MAYS	FIELD CORN	REMOVE FIELD CORN	FRICTION	CARPET W/SCOTCH-BRITE BAR	FAIR				SEVERAL PASSES WERE NECESSARY. RERUNNING THE DISCARD FRACTION WAS NECESSARY TO RECLAIM LOST CROP SEED AND RECLEANING THE CLEAN FRACTION WAS NECESSARY TO REMOVE A MAJORITY OF THE FIELD CORN.	THIS SEPARATION MAY OR MAY NOT HAVE BEEN EFFECTIVE ENOUGH FOR THE SUBMITTER. THIS MIXTURE IS NOT A PARTICULARLY GOOD ONE FOR THE FRICTION SEPARATOR BECAUSE THE ROUGH PARTICLE IS THE DESIRED PRODUCT.
1037	ZEA	MAYS	SWEET CORN	ZEA	MAYS	FIELD CORN	REMOVE FIELD CORN	FRICTION	CARPET BELT, FOAM BAR, 5 DEGREE BAR ANGLE	FAIR		80		SWEET CORN HAD BEEN TREATED WITH 80% CAPTAN, 2 OZ PER CWT, WHICH MAY HAVE AFFECTED RESULTS. THIS REPORT FORMERLY UNDER SAMPLE # 736.	TESTS WITH UNTREATED SWEET CORN SHOULD BE MADE BEFORE DEFINITE RESULTS CAN BE REPORTED.
				ZEA	MAYS	FIELD CORN		FRICTION	4 FT CARPET BELT, BRUSH BAR	GOOD		90			
1142	ZEA	MAYS	SWEET CORN	ZEA	MAYS	DISCOLORED SWEET CORN	DETERMINE REFLECTANCE SPECTRUM OF DISCOLORED AND NORMAL CORN AND TEST COLOR SORTER.	COLOR SORTER		GOOD		80		THE SPRETROPHOTOMETER WAS USED TO DETERMINE A REFLECTANCE DIFFERENCE BETWEEN THE N	USE COLOR SORTER WITH #22 FILTER TO REMOVE DISCOLORED CORN SEED FROM NORMAL.
1149	ZEA	MAYS	CORN	ZEA	MAYS	GERM	CAN A VIBRATORY SEPARATOR BE USED TO REDUCE THE HAND WORK NECESSARY TO DO QUALITY CONTROL ON THESE SEPARATIONS, THAT IS CAN A VIBRATORY SEPARATOR SEPARATE CORN GERM FROM ENDOSPERM.	VIBRATORY						DON COLE BROUGHT THIS IN FOR MATER INTERNATIONAL (JEAN MATER 753-7335) WHO HAD RECIEVED IT FROM SEEDBURO EQUIPMENT CO. THE CONTACT AT SEEDBURO IS KATHERINE A. READING.	
325	ZEA	MAYS	CORN				SIZE TWO VARIETIES OF CORN KERNELS (MAIZ FINE CLIMACELIENTE AND HSO MOSQ.) BY WIDTH AND THICKNESS.							THE HSO MOSQ. CORN WAS WIDTH SEPARATED ON #36, #29 AND #25 ROUND-HOLE SCREENS. FOR THICKNESS SEPARATION, THE HELD FRACTION FROM THE #25 WAS PUT THR	BOTH VARIETIES WERE WIDTH SEPARATED ON A STACK OF ROUND-HOLE SCREENS, THEN THICKNESS SEPARATED ON SLOTTED-HOLE SCREENS.
252	ZINNIA		ZINNIA	CONES		CONE PARTICLES	REMOVE CONE PARTICLES.	PNEUMATIC	SEQ.	POOR					NO RESULTS WERE SATISFACTORY. BEST RESULTS WERE OBTAINED BY CONCENTRATING THE CONE PIECES IN THE DROPPED FRACTION OF THE BLOWER AND THEN CLEANING THE LIFTED FRACTION FURTHER ON THE VIBRATOR.
				CONES		CONE PARTICLES		VIBRATORY	SEQ.	POOR					
				CONES		CONE PARTICLES		SCREENS		POOR					
				CONES		CONE PARTICLES		ELECTROSTATIC		POOR					
				CONES		CONE PARTICLES		VELVET ROLL		POOR					
				CONES		CONE PARTICLES		GRAVITY		POOR					
650	ZINNIA		ZINNIA	INERT		INERT	REMOVE STICKS, EMPTY SEED	SCREENS	SEQ.5 1/2X3/4 OVER #7 RD-HOLE						THE ABOVE SCREENING/PNEUMATIC SEPARATION YIELDED GOOD RESULTS. SIMILAR RESULTS WERE OBTAINED WITH ONE SCREENING FOLLOWED BY TWO PNEUMATIC SEPARATIONS AND TWO SCREENINGS FOLLOWED BY PNEUMATIC AND LENGTH SEPARATIONS.
				INERT				PNEUMATIC	SEQ.	GOOD			99		
278	ZINNIA		ZINNIA	LIGHT TRASH		LIGHT TRASH	SEPARATE ZINNIA SEED FROM SAMPLE OBTAINED BY THRESHING WINDROWED PLANTS.	PNEUMATIC		GOOD					A NUMBER OF PROCESSING OPERATIONS CAN BE PERFORMED THAT WILL PRODUCE ACCEPTABLE SEED INCLUDING PNEUMATIC SEPARATION, SCREENING AND USE OF INDENT DISC.
				SMALL TRASH		SMALL TRASH		SCREEN	3/64X5/16 SLOT	GOOD					
				SMALL TRASH		SMALL TRASH		INDENT DISC	SIZE A DISC	GOOD					
				TRASH		TRASH		ELECTROSTATIC		POOR					
130	ZINNIA		ZINNIA-GOLD. DAWN	TRASH		TRASH	CLEAN SEED	SCREENS	SEQ.1/13X1/2 OVER #7						FINAL SAMPLE, DROPPED IN PNEUMATIC SEPARATOR, WAS RELATIVELY CLEAN.
				TRASH		TRASH		PNEUMATIC	SEQ.FRACT. RETAINED ON #7						
129	ZINNIA		ZINNIA				CLEAN SEED								PROCESSED WITH SUBMITTER PRESENT. NO RECORD.
1167	ZIZANIA	AQUATICA	WILDRICE	ZIZANIA	AQUATICA	UNTHRESHED WILDRICE	THRESH								

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1241	ZOYSIA	JAPONICA	ZOYSIA GRASS				IMPROVE GERMINATION BY SCARIFICATION AND/OR HULL REMOVAL.							REQUEST WAS FOR INFORMATION REGARDING ZOYSIA GRASS SEED CONDITIONING METHODS AND INFORMATION ON SCARIFICATION.	
1189	ZOYSIA		ZOYSIA GRASS				DETERMINE METHODS TO REMOVE FROM THE HULL.								
930			QUACKGRASS	AGROPYRON	REPENS	QUACKGRASS	CHECK REDORDS FOR METHODS FOR REMOVING QUACKGRASS.								QUACKGRASS WAS REMOVED IN SAMPLES 518 AND 208. IN 208, BY R5 DISK AND 1/19 AND 1/20 ROUND HOLE SCREEN. 518 YIELDED NO USABLE RESULT.
102			CARPET OF SNOW	BLACK SEEDS		CARPET OF SNOW	REMOVE BROWNISH BLACK SEEDS (APPARENTLY BAD FLOWER SEEDS) AND TRASH.	VIBRATORY	FINE TEXTURED SANDPAPER	FAIR					NO ENTIREL
				BLACK SEEDS		CARPET OF SNOW		PNEUMATIC		POOR					
				BLACK SEEDS		CARPET OF SNOW		MAGNETIC		POOR					
				BLACK SEEDS		CARPET OF SNOW		ELECTROSTATIC		POOR					
				BLACK SEEDS	CARPET OF SNOW			SCREENS		POOR					
78			COBALT	BLOCKY	RHOMBIC	COBALT PARTICLES	REMOVE SLIVERS AND FLATS FROM BLOCKY RHOMBIC PARTICLES.	VIBRATORY	VARIOUS SURFACES TRIED	GOOD					VERY GOOD RESULTS WERE OBTAINED WITH THE VIBRATOR USING VARIOUS SURFACES; FINE TEXTURED CLOTH, VERY FINE SANDPAPER, AND ALUMINUM.
1109			CAROSTAN	CAROSTAN		CAROSTAN		AIR-SCREEN	SEQ 17/64 RH TOP, 1/23X3/4 SH BOTTOM	GOOD				LITTLE IS INITIALLY KNOWN ABOUT THIS MATERIAL. GENUS AND SPECIES ARE	
				CAROSTAN		CAROSTAN		SCARIFIER	#10 SQW ON MIDLINGS FRACTION	GOOD					
				CAROSTAN		CAROSTAN		AIR-SCREEN	SEQ 1/17 RH TOP, .038 RH BOTTOM	GOOD					
996				FESTUCA	ARUNDINACEA	TALL FESCUE	REMOVE TALL FESCUE	SCREEN	THIS		98	98	99		USE SCREEN
								GRAVITY	THAT		98	50	99		
423			KONSYL	INERT		INERT	REMOVE INERT MATERIAL	SCREENS	SEQ.45X45 WIRE OVER 60X60 WIRE						THE SAMPLE WAS PASSED THROUGH A 45X45 WIRE SCREEN AND A 60X60 WIRE SCREEN. THE FRACTION OVER THE 60X60 WAS RUN OVER THE VIBRATOR TO SALVAGE MORE MATERIAL. THE FRACTION OVER THE 45X45 WAS PASSED THROUGH A 1/21 ROUND-HOLE AND A .027" ROUND-HOLE.
				INERT		INERT		VIBRATORY	SEQ.AL DECK,FRACT OVER 60X60						
				INERT		INERT		SCREENS	SEQ.1/21 OVER .027",FRACT OVER 45X45						
438			COTTONGRASS	INERT		COTTON	REMOVE "COTTON" FROM SEED.	BELT THRESHER	SEQ.	GOOD				THE FRACTION OF LARGE MATERIAL HELD ON THE 1/12 ROUND-HOLE SCREEN CONTAINED MUCH SEED SO IT WAS PROCESSED ON THE LAB DEBEARDER, THEN SCREENED AND BLOWN LIKE THE REST OF THE LOT TO SALVAGE THE SEED.	BELT THRESHING, SCREENING ON 1/12 AND .024" ROUND-HOLE SCREENS, AND BLOWING IN THE PNEUMATIC SEPARATOR YIELDED THE SEED IN A RELATIVELY CLEAN STATE.
				INERT		COTTON		SCREENS	SEQ.1/12 OVER .024" RH	GOOD					
				INERT		COTTON		PNEUMATIC	SEQ.	GOOD					
728			SUMMER SAVORY, SAGE, THYME, BASIL	INERT		INERT	REMOVE INERT MATERIAL (STICKS, STEMS, DUST) FROM FOUR DIFFERENT HERB SAMPLES	SCREENS	SUMMER SAVORY: #8, THEN, .027" ROUND HOLE SCREENS	GOOD				SUMMER SAVORY WITH INDENT CYLINDER PROVIDED HIGH QUALITY PRODUCT, BUT WAS SLOW AND SUBJECT TO JAMMING	SEVERAL KINDS OF DRIED HERBAL MATERIAL CAN BE CLEANED BY SEED PROCESSING EQUIPMENT.
				INERT		INERT		PNEUMATIC	BASIL: 200 FPM	FAIR			HIGH		
				INERT		INERT		AIR-SCREEN	SUMMER SAVORY	GOOD					
				INERT		INERT		SCREENS	SAGE: #25 ROUND HOLE, THEN PULVERIZED, THEN #8 ROUND HOLE	GOOD			HIGH		
786			GUAYULE	INERT		INERT	WHAT EQUIPMENT WOULD THRESH AND CLEAN GUAYOLE SEEDS ON A LARGE SCALE.	BELT THRESHER	SEQ.CLEARANCE: 0, .039, AND .061					ALL FRACTIONS OBTAINED WERE SENT TO THE SUBMITTER FOR EVALUATION.	THE BELT THRESHER HAS THE POTENTIAL FOR INCREASING THRESHING CAPACITY MANYFOLD, BUT GERMINATION TESTS ARE NEEDED FOR THE NONLIFTED FRACTION TO TEST FOR SEED DAMAGE. SCREENS AND PNEUMATIC SEPARATOR DID A GOOD JOB OF CLEANING THE SEED.
				INERT		INERT		SCREEN	6X22 WIRE MESH						
				INERT		INERT		SCREEN	1/20 ROUND HOLE						
				INERT		INERT		PNEUMATIC							
1023			TREE SEED	INERT		PITCH	REMOVE INERT, PITCH							A	
1070			DEER WEED	INERT		INERT	THRESH AND CLEAN	BELT THRESHER	SEQ.					THIS PROBLEM SAMPLE FORMERLY PART OF PROBLEM SAMPLE #710	SAMPLE WAS BELT-THRESHED, THEN CLEANED BY SCREENING AND BLOWING.
				INERT		INERT		SCREEN	SEQ. 1/19 ROUND-HOLE						
				INERT		INERT		PNEUMATIC	SEQ.						

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1071			GOLD FIELDS	INERT		INERT	CLEAN SEED	PNEUMATIC		FAIR				THIS SAMPLE FORMERLY PART OF PROBLEM SAMPLE #710.	VERY LIMITED TRIALS WERE MADE WITH THIS LOT. AIR SEPARATION DID A FAIR JOB OF REMOVING INERT MATERIAL.
1105			DESERT CHICKORY	INERT		INERT	REMOVE INERT MATERIAL	SCREENS	SEQ.18X18 OVER 6X30 WIRE MESH	GOOD	40			A 2MM INDENT CYLINDER MIGHT ALSO BE AS EFFECTIVE AS THE VIBRATOR IN REMOVING THE LONG FLAT INERT PARTICLES THAT WERE LEFT IN THE SAMPLE AFTER BLOWING.	SCREENING WITH AN 18X18 MESH SCREEN OVER A 6X30 MESH SCREEN REMOVED MOST OF THE INERT MATERIAL. THE BLOWER AND VIBRATOR REMOVED MOST OF THE REST ALTHOUGH STATIC WAS A PROBLEM IN THE BLOWER. RESULTING PURITY WAS ROUGHLY 98%.
				INERT		INERT		PNEUMATIC	SEQ.	FAIR					
				INERT		INERT		VIBRATORY	SEQ.SANDBLASTED AL DECK	GOOD			98		
1106			BLADDERPOT	INERT		INERT	REMOVE INERT MATERIAL	SCREENS	SEQ.6X30 OVER 24X24 WIRE MESH	GOOD	70				SCREENING WITH A 6X30 ON TOP OF A 24X24, FOLLOWED BY BLOWING YIELDED A VERY CLEAN SAMPLE WITH LITTLE LOSS.
				INERT		INERT		PNEUMATIC	SEQ.	GOOD	95				
1107			MEXICAN HAT	INERT		INERT	REMOVE INERT MATERIAL (PLANT PARTS).	SCREENS	SEQ.6X26 OVER 18X18 OVER 26X26 WIRE MESH SCREENS	FAIR	20				THIS LOT WAS VERY DIFFICULT BEC
				INERT		INERT		PNEUMATIC	SEQ.	FAIR			75		
511			TITANIUM TURNINGS	METAL		FRAGMENTS	REMOVE TOOL BIT FRAGMENTS MADE OF TUNGSTEN-COBALT-CARBON ALLOY.	PNEUMATIC		GOOD		100	100	MACHINES THAT WERE INEFFECTIVE WERE ELECTROSTATIC, INDENT CYLINDER, VIBRATOR AND GRAVITY.	THE MAGNETIC, PNEUMATIC, AND AIR-SCREEN SEPARATORS ALL REMOVED THE CONTAMINANT WITH LITTLE LOSS OF TITANIUM. AS A RESULT OF THE TESTS, THE SUBMITTER OBTAINED A PNEUMATIC SEPARATOR FOR THIS SALVAGE OPERATION.
				METAL		FRAGMENTS		AIR-SCREEN	#7 AND #6 SCREENS	GOOD		100	100		
				METAL		FRAGMENTS		MAGNETIC		GOOD		100	100		
1079			MUSTARD	NONE			LOW GERM	COLOR SORTER	ULTRAVIOLET HEAD					FIRST TRIAL OF ACTUAL SEED IN PRODUCTION FOR UV SORTING	
1004			QUINOA	QUINOA		NONE	TEST LAH HULLER SCARIFIER	SCARIFIER	#14 SQUARE WIRE	GOOD					LAH HULLER SCARIFIER DID A GOOD JOB OF REMOVING THE HULLS
719			PALM	SHELLS		SHELLS	SEPARATE SHELLS FROM MEATS WITH FRICTION SEPARATOR.	FRICTION	BRUSH BAR, CARPET BELT, 3 PASSES	GOOD			90		THE FRICTION SEPARATOR DOES A GOOD JOB, YIELDING A 90% PURE MEAT SAMPLE WITH 10% LOSS. THE SEPARATION CAN BE IMPROVED BY SIZING THE PALM NUT SAMPLE BY THICKNESS ON SCREENS AND THEN RUNNING EACH FRACTION OVER THE FRICTION SEPARATOR.
				SHELLS		SHELLS		SCREENS	SEQ.20/64X3/4, 16/64X3/4, 12/64X3/4,8/64X3/4						
				SHELLS		SHELLS		FRICTION	SEQ.						
794			PECAN	WORMS		WORMS	REMOVE WORMS	SCREEN	SEQ.#12 1/2 OR #13	GOOD		75		OVER-SCREEN FRACTION FROM SCREENING WENT TO FRICTION SEPARATOR.	SCREENING GREATLY REDUCES THE CONTAMINANT PRIOR TO HAND-PICKING. SCREENING FOLLOWED BY ELECTROSTATIC SEPARATION MIGHT REDUCE WORM CONTENT TO ACCEPTABLE LEVELS WITHOUT HAND-PICKING.
170				WORMS				FRICTION	SEQ.CARPET, FOAM BAR INCLINED 7DEGREES	GOOD		84	100		
175								ELECTROSTATIC		GOOD		93			
250															
395			HONEYDEW			HONEYDEW	IMPROVE GERMINABILITY OF THIS LOW GERMINATION LOT.	PNEUMATIC							SAMPLES SENT TO SUBMITTER FOR GERMINATION TESTS.
								ELECTROSTATIC	18KV, ELECTRODE IN LIFT POSITION						
								ELECTROSTATIC	18KV, ELECTRODE IN PIN POSITION						
482			CYPRESS PINE			HONEYDEW	REMOVE LOW-GERMINATION SEED.	PNEUMATIC	10 TRIALS						FRACTIONS FROM ALL TRIALS WERE SENT TO SUBMITTER FOR EVALUATION.
520			NO WORK DONE.			HONEYDEW		ELECTROSTATIC							
								SCREENS	SEQ.						
								PNEUMATIC	SEQ.						
523			GRASS, SEVERAL TYPES				CLEAN SEED OF TRASH AND SMALL CONTAMINANTS.								IT WAS RECOMMENDED TO SUBMITTER TO USE A #6 ROUND-HOLE TOP SCREEN TO REMOVE LARGE TRASH AND A 1/20 ROUND-HOLE BOTTOM SCREEN TO DROP SMALL CONTAMINANTS.
526			NO TESTS PERFORMED.												
604			CORNNUT				REMOVE BROKEN CORNNUTS FROM WHOLE ONES.								FRICTION, SCREENS, AND PNEUMATIC SEPARATORS WERE INEFFECTIVE IN MAKING THIS SEPARATION ALTHOUGH THERE WERE DISTINCT PHYSICAL DIFFERENCES BETWEEN THE BROKEN NUTS AND THE WHOLE ONES.
655			NO SAMPLE FOR THIS #												
788															
875			FESCUE												
888			VARIOUS				TEST AFFECT OF MAGNETIC FLUID ON GERMINABILITY OF ALFALFA, ONION, RED CLOVER, LEEK AND BERMUDAGRASS.	MAGNETIC							NO DECREASE IN GERMINATION OR INCREASE IN ABNORMAL SEEDLINGS WAS SEED IN ANY OF THE TESTS.

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934							COUNT SEEDS/LB IN SAMPLES OF FESTUCA OVINA AND POA AMPLA.	OTHER	COUNT-A PAC						FESTUCA OVINA: 870,000 SEEDS/LB. POA AMPLA: 886,000 SEEDS/LB.
993						DOWNY BROME	MUST REMOVE ALL WILD OAT, AND GET TOTAL WEED TO LESS THAN 0.5% TOÿMEET CERTIFIED GRADE. SEED FROM MADRAS. 20000 POUND LOT.	SCREEN	HAND SHAKE						
1041			CALLA LILLY			WILD OAT									
1231						RATTAIL FESCUE	THIS WAS A REQUEST FOR INFORMATION REGARDING SEED TECHNOLOGY PROGRAMS AT UNIVERSITIES IN THE US. BODGER SEED CO WAS LOOKING FOR A QUALIFIED SEED TECHNOLOGIST FOR EMPLOYMENT OPENING.								
1240						HENBIT	DETERMINE SCREEN SIZES FOR UNKNOWN FLOWER SEED SPECIES.							THIS MATERIAL WAS SENT TO AL HOFFMAN CO. FOR SCREEN SIZE DETERMINATION. SCREENS OVER AND UNDERSIZE WILL BE DETERMINED.	

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